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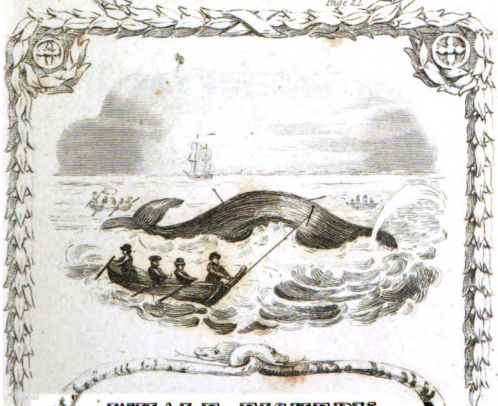
Maria Presley  
given by W. H. Stone





THE SEVEN ABORIGINAL  
PLANTS OF BRITAIN

Page 21.



WHALE FISHERY.

Page 51.

B Hall.

London, Published by W. Joy, S.<sup>t</sup> Paul's Church-Yard Nov. 1828.



**THE  
GIFT OF AN UNCLE;**

**OR,**

**A SHORT DESCRIPTION**

**OF**

**SOME OF THE PECULIARITIES**

**OF THE**

**Animal & Vegetable World;**

**WITH AN ACCOUNT OF THEIR**

**FIRST INTRODUCTION INTO THIS COUNTRY.**

**FOURTH EDITION.**

**LONDON:**

**PRINTED FOR WILLIAM JOY,**

**66, ST. PAUL'S CHURCHYARD.**

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**1830.**



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## THE GIFT OF AN UNCLE,

&c. &c.

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HENRY ACTON was one of a large family, whose parents were very respectable, but of a moderate fortune; and who gave him an education much more suitable to their partiality and wishes for his advancement, than to any well-grounded hopes in his success from their interest or connexions.

Mr. Acton, senior, was a most amiable man, whose knowledge of the world was comprised in a firm conviction, that all his neighbours were at the least as good as they pretended to be; and early associations at a public school and university, had fostered his son's sanguine and independent temper into ridiculous notions of the importance of being descended from a long line of gentry; which vanity could never be entirely eradicated by maturer years and intercourse with the world, notwithstanding the many mortifications attending it.

Placed in a situation of some eclat, young Acton

soon found his straitened means force him either to play a second part in the train of the wealthy, and gain the reputation of a good fellow whom every body knew; or else, by withdrawing from a participation in expenses he could not afford, subject himself to the epithet of a stiff, unsociable individual. Here his pride of gentle blood and ideas of honour stood his friend; and he continued firm in his principles of independence, though the repeated success of the sycophant and unworthy which he witnessed, gave his naturally open disposition a shade of discontent, and even moroseness.

For many years he had struggled through life; sometimes experiencing slights and injuries where he had a right to expect friendship and kindness; and at others, meeting with the most affectionate solicitude from those whom he scarcely knew but as casual acquaintances: till at last, completely disgusted with the "ways of the world," which he could not alter, and disdained to follow, he retired with a very limited income, and the woman to whom he had long been ardently attached, to a picturesque part of the west of England.

In this seclusion, Henry Acton felt himself happier than at any former period of his existence; He knew himself poor, but his poverty was not insulted by a daily display of superior wealth among those with whom he was obliged to associate. And the fondness of his wife, joined to the affection of

his children, made him once more feel himself a being of some consequence, as others depended on him for happiness.

The amusements of a country life, and the domestic enjoyments of an united family, caused years to pass away almost unperceived and unlamented; but yet (such is human nature) there were moments when Mr. Acton looked back with a feeling of regret to the active duties of his former life. It was on one of these occasions, when he was leaning back in his chair after tea, his arms folded, and his eyes fixed on the fire, that his wife came softly behind him; and imprinting on his cheek a kiss, which immediately recalled him from his reverie, caused him to press that hand to his forehead, whose fingers were fondly playing with his hair.

“How hot your head is, my dearest Henry, and how quickly its pulses beat,” said his affectionate partner: “I am certain you are giving way to one of those passing fits of melancholy, that, thank heaven, I witness but seldom, though never without pain.”

“Indeed, my Emma, you are right,” replied Acton. “And it does not surprise me that you should discover, what a woman not extremely attached to her husband might let pass unnoticed: I could not attempt to deceive her who knows every turn of my countenance, and who has always enjoyed my unlimited confidence. Believe me, how-

ever, my devotedness to you is not at all weakened by time! The partiality of a lover has been strengthened by the esteem of a husband: but I cannot help sometimes looking back to the visions of my youth, and regretting that the sanguine expectations I then entertained of fame and fortune, honour and rank, have not been realized. I used to dwell so fondly on the delight with which I should introduce my beloved Emma to the admiration of society, when I had raised her to a station above mediocrity; and it was a long time, you know, before that incitement to persevere was overcome by other less amiable passions."

"Come, come, dear Henry, you must give up these idle remembrances to my peace of mind," rejoined Mrs. Acton; "for be assured, we are much happier in being raised above want—and yet too humble to attract the envenomed shaft of malice, than we could possibly be in any other situation, however exalted. The truth is, you want occupation for the mind, which all the active employments of a sportsman cannot give. And it appears to me, that our boy and girl are now becoming of an age which requires your earnest attention to their education; a subject which will soon drive away all your 'castles in the air.'"

"Upon my word, Emma, you do my abilities as a tutor great honour, by your flattering opinion of them. But you must remember I have often told

you, that I have forgotten my Greek altogether; and I am ashamed to say, my recollection of Latin is also extremely imperfect."

"But, dear husband, I did not mean to refer to the classics. William will learn quite enough of them in addition to his other studies at the neighbouring boarding-school; and you have frequently expressed a determination to adapt his instruction to the slender patrimony he will inherit, and the class of society he will probably mingle with; so as not to expose him to feelings, which you acknowledge having so bitterly experienced yourself.

"It occurred to me a few days back, on re-perusing the story of Alphonso in the 'Tales of the Castle,' that it was quite within the scope of your reading, and would prove an interesting task for your idle hours, so to arrange a short description of many varieties of the animal and vegetable world, as would both be pleasing and instructive. And this you might render yet more amusing, by mentioning the first introduction of them into England."

Henry Acton here interrupted his wife, by pressing her still closer with the arm which had encircled her waist during the preceding conversation; at the same time remarking, that her proposal was attended by many and much more considerable difficulties than she seemed to imagine; as it would require a great deal of *tact* to avoid a mere cata-

logue of remarkable circumstances, and convey the information in such a manner as would be thought an agreeable recreation.

To this Mrs. Acton replied: "When I first started the subject, it was chiefly with the intention of withdrawing your mind from painful recollections; but as you seem to have taken up the idea seriously, and it may afford us both continual gratification, why should we not adopt the plan of that charming little book called 'The Visit of a Week?' A work which, had it been more diffuse and described a greater number of the wonders of art and nature, would have rendered our present discussion quite unnecessary.

"You are anxious William should enter trade; and can any thing be more likely to give him a partiality for that occupation, than being taught to consider mankind indebted to it for almost all their comforts? When we point out to him, how very few plants, or fruits, or natural productions, are indigenous to his native country; will he not feel proud of trade, which has raised England to be perhaps the most powerful empire that ever existed."

"Say no more, my own Emma; we will immediately commence the arrangement of your plan. First, it will be necessary for us to talk over together those objects we deem most desirable to descant on; and then having written down whatever remarkable circumstances we may know con-

cerning each, introduce the subject at our meals and during our walks ; so as not to fatigue the minds of our children with the fear of a lesson."

Mr. and Mrs. Acton pursued their intention with a success that was only equalled by their own gratification, in perceiving the minds of their son and daughter expand daily under a course of instruction which was hailed as a treat. And such was the accession of happiness conferred on the whole family, by rendering the parents and children indebted to each other for amusement ; that Woodland Cottage was cited in the neighbourhood as the spot where discontent found no resting-place.

"What an excellent appetite you have this morning, my boy!" said Henry Acton one day to his son. "There you sit, despatching your breakfast as a matter of every day occurrence ; without once reflecting on the various distant countries which have been explored, and dangers encountered, before the few articles which compose your present meal could be displayed on the same table.

"The TEA, for instance, which is disappearing so fast while you look at me with incredulous and laughing eyes, was not known in England till the Dutch introduced it about the year 1660, fifty years after they had first brought it to Europe ; and has conduced more to the sobriety of the nation than all the laws against drunkenness which ever

were framed. It is the leaf of a plant growing in China; and though brought nearly 14,000 miles, forms now an almost indispensable article of food to the very poorest of our peasantry.

“The natives of Eastern Asia drink their tea without any mixture; but we Europeans put into it milk and sugar. The former, I need scarcely tell you, is given us by that most useful of all the British animals, the cow; which likewise supplies us with beef, cheese, butter, leather, and various articles formed of its horns, bones, and even entrails.

“BROWN SUGAR is made by squeezing and then boiling the juice of the soft pith of a species of reed or cane found in the East and West Indies; and the refuse undergoes a process of fermentation, from which rum is extracted. Europeans are said first to have become acquainted with sugar during the crusades, five or six hundred years ago; but the art of refining it into the beautiful white lumps your sister Julia is dropping into her cup, was discovered by a Venetian, and not known in England until 1659.

“In former times, honey was used to sweeten liquids. A substance culled from different flowers by that industrious little insect the BEE, whose repeated flights to and from the hive with its body covered with a sort of yellow dust, we have so often pleased ourselves with watching Do you

remember, Julia, observing a large number of bees attack and drive away some wasps that attempted to enter the hive; and just before winter their expelling and killing the drones, or idle portion of their community? Your mama showed you likewise the comb under a glass cover; and you were both delighted at seeing some thousands of those interesting insects busily employed in preparing cells—filling them with honey—and then closing each with wax.

“The natural history of the bee, and the attention paid to the queen of each hive, is extremely curious; and as perhaps you may think that of the ANT and BEAVER not less so, I will give you likewise a short description of them. There are five species of ants in Britain. Each colony is composed of one queen, some males, which have wings, and a numerous body of the neuter or working sort. They dig their habitations deep in winter, but near the surface of the ground in warm weather, and divide them into a number of small oval cells communicating with each other, which are drained and kept clean; dirt, and the bodies of those that die, being dragged out.

“In the summer it is quite amusing to see how busy the whole community is; some pulling along substances much larger and heavier than themselves, while others come to assist in overcoming any obstruction. In the winter it is supposed they are

torpid, as they do not lay up any stores. A larger sort of this insect is very destructive in some parts of Asia and Africa; and from the almost incredible multitudes which appear, becomes even formidable.

“The BEAVER is three or four feet long, and weighs fifty or sixty pounds. It has webs on its hind feet for swimming, toes separated like fingers on its front, and a flat oval-shaped tail covered with scales, on which it draws loads.

“These animals assemble together during the summer to build houses, which are most ingeniously constructed, being divided into apartments; and as they live equally well either on land or in water, their habitations are usually across some morass or swampy lake. They were formerly found in England; but the latest account of them in this island is in 1188. At present they are tolerably numerous in Canada and the northern parts of America, although the value of their hair and skin, with which we make our hats, occasions them to be eagerly sought after and destroyed by the hunters.

“I may as well remark, that hats were first worn in England in the year 1400; which was at the commencement of the reign of Henry IV. And now, my dear children, breakfast being over and the day fine, if your mama will give you leave to accompany me, I will fetch my gun; and we will all stroll about the vicinity of the house.”

Julia and William were delighted ; Mrs. Acton gave a willing consent provided she might join the party ; and in a few minutes they started, accompanied by a favourite setter. " How I do love Rall, papa ! " said little Julia. " He is always so happy to see me ; wagging his tail, licking my hands, and looking in my face as if he knew what I said to him."

" You are right, my dear girl, to be fond of him, for dogs are the most sagacious and faithful companions of mankind. And though they cannot be ranked in usefulness with the cow, or the sheep which supplies us with wool, and mutton for food ; or that noble animal the horse, without whose assistance the labour of man would be increased almost to an insupportable degree ; or even the hog, which eats every sort of refuse, and whose flesh is a principal article of consumption ; yet they are more attached to their masters than any of them ; more completely domesticated, obedient, and confiding.

" Poor Rall ! how quietly he allows you and William to play with and tease him, whenever you have nothing else to do. But take notice of him now ; he has got on the scent of some game. Wait here both of you, with your mama ; while I walk up to him and have a shot."

Almost immediately Henry Acton sprung a fine cock pheasant, which he killed ; and was rejoined by his children when loading. The beauty of its

plumage gave rise to many exclamations; and the affectionate mother took the opportunity of remarking, that PHEASANTS were originally natives of Asia; the common sort having been brought to Europe from Colchis on the Black Sea, but the gold and silver species from China: and Mr. Acton added, that game of every description ought to be considered of importance in this country, as an inducement to gentlemen to reside on their estates and spend their money among their tenantry, instead of living constantly in towns, as was the custom on the continent.

William, who had been holding the ramrod and wadding for his father, now asked a great many questions about fowling-pieces and GUNPOWDER: and Mr. Acton, pleased to find him so inquisitive on the subject, said the latter was composed of a mixture of nitre, charcoal, and sulphur, and was usually supposed to have been invented by Schwartz, a German, in 1320; though it is mentioned in the writings of Roger Bacon as early as the year 1216. and some declare it to have been known to the Chinese about eighty-five years after the death of our Saviour. One of the first times it was used in Europe, was on Saturday, the 26th day of August, 1346, at the battle of Cressy in Picardy; when a few pieces of cannon greatly assisted the English under Edward III. in their celebrated victory over the French. Muskets were first made use of in

1521; but many years elapsed before fire-arms became sufficiently known and improved for general use; and defensive armour was not entirely left off in England till after the restoration of Charles II.

While the children were attentively listening to the remarks of their father, and demanding explanation of such as they did not understand, the party observed a HAWK at a considerable height, suspending itself in the air by a very quick and almost imperceptible movement of its wings. Mr. Acton had scarcely time to mention that it was a bird of prey, and was no doubt then hovering over some animal it intended to seize, when it made a stoop with amazing rapidity, and rose again with something in its talons.

“You have just witnessed, William, what for several centuries formed one of the favourite amusements of our English gentry. Different species of the hawk tribe were trained by falconers, to sit quietly on the hand with a hood over their eyes, till game of some sort or other appeared in view; when the hood was withdrawn, and the bird instantly flew after its prey with resistless force, striking it dead to the ground in sight of the sportsmen. Even at the present time, though hawking is not attended to, the custom of presenting our kings at their coronation with some of those birds, is still kept up.”

Mrs. Acton now proposed that herself and chil-

dren should occupy themselves in the flower garden, whilst her husband pursued his sport; and accordingly, in less than half an hour Julia and her brother were busy with their spades and wheelbarrows, their mother cheerfully assisting them in their work.

"What a number of pretty flowers we still have in bloom, mama," said the children; "though not near so many as a few months ago: England must surely be more beautiful than any other country, from the great variety it produces."

"I assure you," answered their mother, "we are indebted to foreign soils and commercial intercourse for almost all the 120,000 varieties of plants and roots which are now cultivated among us; for those indigenous to this island are extremely limited indeed. In the time of Queen Elizabeth for instance, not much more than 200 years back, even salads and green peas, for the royal table, were fetched from Holland. To enumerate all would be both tedious and uninteresting; but I think you would like to know from whence some of those you see every day originally came.

"The pink and carnation were brought us from Italy, but grow wild in Eastern Asia; as does the tulip, the jessamine, the lily, and the lilac. And to that quarter of the globe we likewise owe many of our most useful vegetables; as the asparagus, cauliflower, horse-radish, and kidney bean.

“The sweet-scented mignonette you are so fond of, is a native of Egypt; as is also the onion and the auricula. The jonquil, laurustinus, and daffodil, come from Spain; the sweet-pea from Sicily, and sweet-william from Germany.” “Why, dear mama,” cried Julia, “you leave scarcely any thing as belonging to England, except the honeysuckle and violet. But pray when were the different roots planted here? for they appear now to grow quite naturally, without much trouble being taken about them.”

“Your question is rather a comprehensive one,” replied Mrs. Acton, “and difficult to answer correctly; but one of the first individuals who is mentioned as having introduced a great number of new trees and shrubs into this kingdom, was a gardener of Henry VIII. named Wolf; and since that period, scarcely a ship has sailed to a distant clime, or a traveller made a long journey, without bringing home some species of plant unknown before. Thus, America has furnished us with two or three thousand; and 1700 have been introduced from the Cape of Good Hope.

“But it is not in flowers or vegetables alone that the original poverty of British productions is apparent; as most of our fruits and shrubs, and even some of our trees, came from a warmer climate. However, we may justly rejoice in the mildness and salubrity of our native country; when so numerous

a collection of roots and plants, gathered from every part of the known world, flourish so well under all its variations of temperature. Indeed, England is ascertained to be more healthy than most other kingdoms, as the deaths only amount to one in forty-nine; while in Sweden they are one in forty-three, and in France still more."

William, who was digging, suddenly stopped, and said, he could not conceive of what use worms were, except, like the large one he had just cut in halves, to get in the way of the spade. But his mother pointed out, not only their utility as food for birds; but that by boring the earth in every direction, they prevented its becoming a hard solid mass, and thus promoted vegetation.

The children beginning to get tired, walked towards the house, when William, pointing to a bed of POTATOES, said, "Surely, mama, that vegetable was always produced in England; for I see it in every garden, and the poor people are so fond of it at dinner." "You are again mistaken, my love, for it only became generally known and eaten with us about the year 1663, although it had been introduced into Ireland a century before. It grows wild in Brazil, a kingdom of South America, and is said to have been discovered by some travellers who were hungry, and attempted to eat that green-looking apple which is on the top of the stalks; but finding it nauseous and bitter, plucked up the

plant in a pot, when they saw the nutritious substance, now so universally liked, hanging from the roots. The potato is, perhaps, the most valuable gift we have derived from the discovery of America. And as you seem, my dear children, to be so much pleased with the short detail of various productions that your papa and myself have given you this morning, we intend to lose no opportunity of drawing your attention to those objects we may deem most worthy of remark. It will prove a most varied amusement, and one without fear of a speedy termination; there being nothing in the animal or vegetable world, however insignificant it may appear, which has not some wonderful properties."

Mr. Acton returned home about an hour before dinner, and displayed the contents of his shooting bag to his son and daughter.

Julia first took hold of a woodcock, and begged to know what bird it was, and why it had so long a beak. Her papa told her its name, and said its long bill was necessary to provide it with food; as it lived by sucking the moisture and different substances from the marshy springs and moss generally met with in thick woods.

"It is a bird of passage, not remaining in this island all the year, but only during those winter months when the frost is too intense in more northern countries to allow of its feeding; and if the weather is not tolerably mild with us, it even flies further

south. Sometimes, however, as in this case, a stray woodcock will be found in this country before the winter commences. Snipes, fieldfares, and several other species of birds, are likewise only occasional visitors to this kingdom; but I shall have more favourable opportunities hereafter of describing to you one or two of the most singular sorts." A hare, a rabbit, and a brace of partridges, next attracted their curiosity; and they were told, that in the frozen regions of the north the former became during winter quite white, so as scarcely to be distinguishable from the snow.

During dinner, innumerable questions were asked by the children concerning things which had hitherto passed unnoticed; and Mr. and Mrs. Acton were never tired of explaining, as far as their own information would permit.

"Tell me, papa," said William, "how they make the GLASSES we drink out of. Do they cut away the inside, as I have seen the carpenter make holes in wood?" "No, my boy; the manufacture of glass is particularly curious; and the first time we go to Bristol, I will take Julia and you to see it. It is a substance composed of flint or sand, and an alkali; and when perfectly melted over a very hot fire, a man dips the end of a hollow tube into it, and begins to blow as I have seen you do soap bubbles; moulding it all the time into any form he pleases, by means of a bit of iron, or something

e'se, which he holds in his hand. Plate or window glass of large dimensions is formed by the liquid being run on a frame of pot-metal; and if quick-silver is attached to one side, it becomes a looking-glass. The polishing and cutting of glass into the beautiful devices we so constantly see, is performed with a lathe after it is quite cold; and is very injurious to the workmen, from the minute particles getting into their lungs. This substance was used for the windows of churches and palaces in England, as early as the year 1180; but it does not appear to have been made in this country until the beginning of Elizabeth's reign.

"The making of PINS is another most curious operation, which we will take the earliest opportunity of looking at; and you will be surprised to observe how many different hands each of those common trifling little instruments goes through before it is ready for sale. I do not exactly know when they were first made in England, but very probably about the year 1545, as needles were then manufactured here by a native of India.

"Some few summers hence, my dear children, when your mama quite approves, we will all take an excursion through some of the most picturesque parts of the country, inspecting the different manufactories of the towns, and all other objects most worthy of notice; but at present, you must be con-

tent with reading and listening to such superficial accounts of them as I may be able to give."

"Pray, mama," said Julia, "give me some apple tart, because I am sure then of eating a real English fruit."

"I shall be most happy to help you, my love, but I am not quite sure that any country can justly lay claim either to the apple or pear as its natural production; they being generally good for nothing till carefully grafted and cultivated. I am aware some persons affirm these fruits to be produced in perfection, and in a wild state in Asia; but I know from experience, that if you sow the kernels of the best sorts, they will often grow up into little better than crab apple trees. Pippins were first planted at Plumstead, near Brighton, in the sixteenth year of Henry the Eighth; and since then, the cultivation of apples by grafting has been much attended to. It has been asserted, that when the parent trees, from which grafts have been taken, die, all the grafts die also; but I cannot give credit to so improbable a circumstance."

"Pray do tell us, mama," exclaimed William, "what fruits really are natives of this island; for all seem now to be so very common, I feel quite surprised when you talk of their having been introduced from other countries."

"The answer to your question will not be very

tedious ; for I believe the currant, the raspberry, the bullace, one out of four hundred different sorts of strawberry, the barberry, and sloe, together with the common hazle-nut, is a list of nearly all the varieties of fruit which Great Britain can boast of being indigenous to its soil. Consider then, William, how proud we ought to be of belonging to a nation, which by its industry and commercial enterprise, has so completely overcome the disadvantages of climate, as to introduce the richest of nature's gifts into successful cultivation.

“ It is said that Buonaparte used sometimes to affect to sneer at the English, calling them a nation of shopkeepers ; but he found them brave enough to defeat his armies in the field, and sufficiently patriotic to submit to the heaviest taxes, rather than crouch beneath his power. The English have indeed been always wise enough to honour trade as well as follow it ; for their King Alfred (one of the greatest monarchs any country can boast of, and who flourished about nine hundred and fifty years ago) made every merchant a nobleman who had taken three foreign voyages.”

When the cloth was removed, the dessert became the subject of conversation ; the children being desirous of knowing from whence each different sort of fruit on the table originally came.

“ Grapes,” remarked their father, “ are the produce of the vine, a beautiful plant which we usually

train against the sides of our houses and walls ; but in the north of France is pruned like a raspberry bush, and further south, grows either on trellis work, or in festoons from tree to tree. It is supposed to have been brought here by the Romans, a very few years after the birth of our Saviour ; and a sort of wine was certainly made of its fruit by our forefathers, as the Isle of Ely, in Cambridgeshire, was called the island of vines by the Normans ; and we read of vineyards in Gloucestershire, Hampshire, and Sussex.

“ There are at this time two or three remarkable vine-trees in England. That of Hampton Court extends a hundred and fourteen feet in length ; and generally produces two thousand bunches of grapes, each, on an average, being a pound in weight. It was planted in 1769 ; and the stem is thirteen inches in girth.

“ The grape differs very materially in richness and flavour, according to the soil and climate in which the vine is cultivated. The red wine we are in the habit of drinking, is from Oporto in Portugal ; the white is called sherry, and is from the vicinity of the town of Xeres in the south of Spain. Claret comes from Bordeaux, and in France is called after that city ; but it is mixed with brandy for the English market, and then changes its name. It has been an article of traffic with us ever since the year 1172.

“ *Lachryma Christi* is from the grapes which grow on Mount Vesuvius, and is a very expensive wine. Tokay comes from a particular vineyard in Hungary; and is so scarce, that a few years back some belonging to the Duke of Queensberry sold for 150*l.* the dozen, or about one guinea a glass.

“ Pliny, who lived within a century after the commencement of the Christian era, says, there were eighty different kinds of the best wines in his time; but the mode of making most of them has been long forgotten. The first duty on wine levied in England, was in 1272, at one penny per tun; and the historian Stowe mentions, that in the year 1389 the best foreign wine was twenty shillings per tun, and thirteen shillings and fourpence for the second quality; which would amount to about three halfpence per dozen.

“ Those raisins Julia is now eating are merely dried grapes; and the best sort are, I believe, from Smyrna, a town belonging to the Turks, on the coast of Asia Minor. The almond is the kernel of a nut, which grows on a tree first planted here in 1548; and is found wild in Syria and Arabia.

“ Nectarines and peaches come from Persia; and were brought from Italy in 1524 by Wolf, the gardener of Henry the Eighth. Filberts were cultivated in England about the same time, and grew originally in Pontus, a province on the Black Sea; from

whence they were probably introduced to a European climate by the Roman general Lucullus, as he presented Rome with the cherry-tree from the same kingdom, 68 years B. C."

After their son and daughter had gone to bed, Mr. and Mrs. Acton congratulated each other on the success of the plan they had adopted ; and determined to persevere in a course which could not fail of expanding the minds of their children ; while it also formed the amusement of the whole party.

Every day some new object attracted attention, elicited remarks ; and by causing the happy family more minutely to examine the beauties and wonders of nature, made them more deeply sensible of the mercy and power of that Being who created all things.

One evening, at tea time, little Julia reminded her papa of his promise, to give them an account of the SILKWORM and of COFFEE, which he immediately complied with as follows:—

" You both remember, no doubt, when I pointed out the mulberry tree ; I said it grew spontaneously in Asia, and that the first one in England was planted in the gardens of Sion House, in 1548, where I fancy it is still existing. Mulberry leaves form the food of a caterpillar, which is produced from a yellowish egg, laid by a grey kind of moth ; and turning into a grub, spins a round web of silk, which it would eat through and spoil, if not killed, by being placed

in a hot oven. These webs are carefully wound off on reels, just the same as thread or cotton, and put by for use.

“ It appears that silk was first brought into Greece from Persia and Eastern Asia, upwards of two thousand years ago ; and was supposed to be a vegetable production of such value and rarity, as to be purchased for its weight of gold, even in the reign of the Emperor Justinian. This error was rectified, however, in the year 555 by some monks, who brought the eggs of the worm to Constantinople.

“ Charlemagne sent two silken vests, in the year 780, to Offa the Saxon king of Mercia, which seems to have been the first silk seen in Britain. In 1286, some ladies of high rank wore silk mantles at a ball given in Kenilworth Castle, and in 1534 the clergy adopted it ; but knit silk stockings were unknown till a Mrs. Montagu made a pair, and presented them to Queen Elizabeth.

“ At present it is an article in such general use, that the British silk trade alone is valued at ten millions sterling ; and employs in one way or another more than four hundred thousand individuals.

“ In regard to ~~COFFEE~~ I have not much to tell you. It is a berry which grows on an evergreen shrub, with white fragrant flowers, found in Ethiopia, Arabia, and Turkey ; and the best is from Mocha, a town at the entrance of the Red Sea, though the greater part now drank is brought from the West Indies.

It was first used among us by a student at Oxford, in 1641; and to possess the finest flavour, the berry should only be roasted just before it is wanted."

"But, papa, you sometimes take CHOCOLATE at breakfast; what is that made from?" "It is compounded of some drugs and the kernel of the cacao or chocolate nut, which is almost as big as an almond; sixty or seventy growing in one large pod, shaped like a cucumber. The tree resembles that of the cherry, is about eighteen feet high, and the beverage was first known in England in the eleventh year of the reign of King Henry the Eighth; but there is another liquor yielded from the thin shell of the nut when ground and boiled, called cacao, which is less rich, and perhaps more wholesome than the chocolate."

Here William interrupted his father, by saying he had always understood the cocoa-nut tree to be at least sixty feet high, and its fruit nearly as big as his head. "And so it is, my dear boy," replied Mrs. Acton; "but you confound the cacao with the cocoa tree; which, from the similarity of the names, very often happens. The latter is indeed a noble tree, growing perfectly straight, with all its branches on the top.

"It is one of the most useful productions of the vegetable world, as its young leaves when boiled are eaten instead of cabbage, the juice exuding from an incision in the bark makes the best arrack, the

fibrous outside of the nut forms excellent cordage, and the milk of the kernel is particularly wholesome in hot climates.

“As I see you are going to ask me what arrack is, I will at once state it to be a spirituous liquor, much used in warm countries, and commonly extracted from rice, a grain which grows in marshy places, and is the principal food of the natives of Hindostan.”

The children ran to the window which was open, the night being warm and beautiful; and soon drew their parents after them, by asking the names of different stars. “That which you now point to, Julia, is a planet; and one of the finest of them. If you observe it well, you will find it does not twinkle like the other stars, but shines with a steady light, which is occasioned by its merely reflecting that of the sun, having no brilliancy of its own any more than the moon or this earth we inhabit.

“Until lately, only seven planets were known; but four or five more have now been discovered. They are all at a much less distance from us than the fixed stars, the nearest of which is removed from this globe to a point almost inconceivably far. It is certain the stars are not enlightened by our sun, and therefore it is highly probable they are suns also, to give light, heat, and vegetation, to systems of worlds of their own. Their number can never

be ascertained, because others are constantly discovered by the help of good telescopes; and in fact there is nothing which so strongly impresses on the mind the insignificance of this earth and all it contains, as the study of astronomy."

"Oh! do pray, papa, tell us a little more about the stars and planets," exclaimed both the children at once; "it is so very amusing and astonishing at the same time." "Perhaps at some future time," continued Mr. Acton, "I may be able to show you an orrery, which represents the movements of this earth and the planets round the sun. The whole is so clearly displayed on that beautiful piece of mechanism, that you will learn more by looking at it half an hour, than by my descriptions in a month; I will however attempt a short account for your gratification.

"The sun is the centre of our system; is nearly one million of miles in diameter, and one hundred millions distant from us. The two planets, Mercury and Venus, are nearer to the sun; and Jupiter is more than one thousand times as large as this globe.

"The earth we inhabit is not quite round, but a little flattened at the poles, like an orange. It is 8000 miles in diameter; moves round the sun in 365 days, 6 hours (which is the length of our year), at the rate of 60,000 miles an hour; and by turning on its axis once every 24 hours from west to east, causes the divisions of day and night, and makes

all the heavenly bodies appear to move in a contrary direction."

"Why, papa," cried the children, "do you really mean the earth is turning round so fast, when it always seems to be immoveable?" "Yes! my loves, I really do! But don't you remember, when we were a few months back on board a small vessel in the Bristol Channel, I told you both to look out of the cabin window and observe how the country seemed to pass by us while the ship was stationary; yet you were afterwards convinced when on deck that the whole was an illusion, as the vessel alone moved. So it is with this globe; we look at the sun and stars, and fancy they only are in motion.

"Revolving as this earth does with such amazing velocity, its particles would fly into confusion, if not held together by the power of gravitation and attraction, which binds all the component parts, as it were, into one mass." "Surely, mama," said Julia, "that beautiful moon which is rising above the trees, is much larger than the other stars." "No, dear girl; but it is much nearer to us, being only about 240,000 miles distant, and 2180 in diameter. Our earth acts as a moon to her, reflecting the light of the sun as she does to us, but appearing thirteen times as large."

"Explain, mama, why the moon is sometimes quite round, and at others only partly so!" "It arises from the same side being always turned towards

us. Therefore, when between our earth and the sun, the moon is quite dark ; but as she advances towards the east, the sun illuminates a small portion of the surface we see, which is daily increased to the full, and afterwards decreases from the same cause.'

At this instant Julia begged her parents to look at something which glittered in the hedge, and asked what it could possibly be ! " Upon my word," said her father, " if it were not so late in the year, I should think it must be a glow-worm ; and perhaps the unusual warmth of the season may account for one of those insects appearing even now. William and I will go out, and endeavour to catch it."

On quitting the house, a bat flitted round them several times, which Mr. Acton pointed out as a very curious bird. " Its body," said he, " resembles that of a mouse ; and the toes of its fore-feet are joined by a strong membrane, which expands like wings. It is decidedly the link between quadrupeds and birds, as it partakes of the nature of both."

Having secured the glow-worm, they returned to the room where Julia was impatiently waiting ; but both herself and brother were much surprised on looking at the insect, to find it more like a dirty beetle than a small bright worm as they had expected. On removing the candles, they observed the same luminous appearance as had at first at-

tracted their attention; and their mama mentioned, that in Italy there was a species of fly which emitted sufficient light to read by, if two or three were confined under a glass.

"In the West Indies," she added, "there is also an insect which shines extremely, and is fond of frequenting spots newly dug; so that on a dark night, the waving boughs of a tree growing over a new-made grave, will sometimes present the beautiful appearance of being covered with brilliant little stars."

The next morning at breakfast, among other things on the table were some red herrings; and William immediately reminded his father, that he had often promised to take him fishing. "This is not the time of the year, my boy, to catch trout, which is with an artificial fly, and by far the most amusing; for it not only requires a considerable deal of skill, but leads the sportsman to the banks of the most romantic little streams. If your mama, however, does not object, we will endeavour to catch some pike for this day's dinner.

"You are not aware, perhaps, that the fish of which you are now eating, is one of the most valuable kinds the sea produces for the use of mankind. It derives its name of HERRING from a German word which signifies a crowd, and very justly so; for about the month of June, shoals of these fish (five or six miles in length, and three or

four wide) appear off the Shetland Isles to the north of Scotland; and being driven either by hunger or instinct, pass down the two coasts of Britain, till they again meet at the Land's End in Cornwall. From thence they cross the Atlantic Ocean to America; and so numerous are the voracious enemies they meet with in their long course, that in spite of their almost incredible numbers, very few are supposed to escape back to the polar regions.

“ It has been calculated by some who love the marvellous, that the multitude produced by the herring at each spawning is so prodigious, as to equal in twenty years, if left unmolested, a bulk ten times as big as this globe we inhabit. It is certain that fish are extremely prolific; for the mackerel is said to produce 500,000 young ones each season; the flounder, one million; the cod, eight or nine millions; and the sturgeon, a large and excellent fish, sometimes caught in England, but very plentiful in Russia, often contains a full bushel of spawn; of which a kind of butter called caviar is made, and much prized by the Muscovites.

“ The first person who taught the art of pickling herrings, was a Dutchman of Sluys, named Beaulen; about the year 1370; and his countrymen considered him so great a benefactor to the public, as to raise a statue to his memory.

“ The cod is also particularly valuable, on account of the number of boats and men employed in

its fishery from February to June. It is chiefly caught on the Banks of Newfoundland in North America, which is an immense range of mountains under the sea; and though each fish is taken with a hook and line, an expert hand will secure nearly 400 in a day.

"You would be quite delighted, Julia, to witness the sagacity of the NEWFOUNDLAND DOGS, employed by their masters to watch the fish when drying on the beach. They will likewise frequently dive after a cod which has slipped off the hook, and bring it back between their teeth uninjured."

Mr. Acton now got up to fetch his fishing rod and tackle, in which he was busily assisted by William; and they started for a large piece of water in the neighbourhood, not forgetting to take Rall with them. After trying for some little time without success, William pointed out a small clear spot amidst the sedge and weeds, and the bait was scarcely dropped in, when it was eagerly seized and carried off. "Observe, my boy," said the fond father, "how fast the reel turns round, and the line runs out! I must not check it, till the fish has carried its prey to a favourite haunt among the reeds. Then he will begin to devour it head first; and after a few minutes I shall give a jerk, hook the jack, and pull it out by gradually winding up the line."

The fish did not prove a very powerful one, and was quickly brought towards the shore; when it

suddenly disappeared again, dragging the line out very rapidly. "Why, papa, I thought the jack had been almost exhausted; and yet it now darts away more violently than at first." "I strongly suspect, William, that a larger pike has seized the one I had at first caught; and if so, we may perhaps take both by having a little patience, for I have known such a circumstance occur more than once. The pike is indeed from its voracity, very often called the fresh-water SHARK."

"What kind of fish is that, papa?" "It is one of a very considerable size, found in the seas of most warm climates; has a very large mouth armed with many rows of teeth, and is so excessively voracious as to seize on any thing thrown overboard. They often follow vessels for many leagues, devouring every unfortunate sailor who may fall into the sea, or venture there to bathe; and fighting among each other for the prey. The shark would be a much more formidable creature even than it is, if it was not obliged to turn on its side before it can bite, on account of the upper jaw projecting beyond the lower; which gives its victim an opportunity of escape."

Mr. Acton had considerable difficulty in landing his prize, as it struggled a good deal, and proved to be nearly ten pounds weight. On examining it, his surmises were found correct; for, much to his son's gratification, another jack of about a pound was taken out of the gullet.

William asked his father if there were any **CARP** in the pond where they were now fishing; because he had heard of their being caught by tickling, and could hardly believe it possible. "Yes, there are carp of a large size, and quite grey with age; and also tench, eels, dace, and other small fish. Perhaps a person's hand might be got under the gills of a fish when sleeping near the surface and banks of a river, and so catch it; but from their having no eyelids, the eyes always appear open, and it is difficult to know whether they are asleep or not.

"Carp were not originally natives of England, but brought about the sixteenth year of King Henry the Eighth; and are said to live to the age of a hundred: pike will live even twice as long. The eel is a very common fish, sometimes called the water-snake; and connects the tribes of fish and insects."

At this instant the dog barked, jumped into the sedge, and put up some **WILD DUCKS**. When Mr. Acton remarked, that in the Fens of Lincolnshire there was a curious mode of catching those birds for the London market, which he would describe.

"A person having a covering of osiers, or wicker-work, over his head, wades into the water up to his chin; and thus getting among the ducks without frightening them, pulls them by the legs under the water, one after another, till he has taken enough."

Before they returned home, William pointed out a large number of **SWALLOWS** assembled on the

osiers which overhung the water; and his father told him, it was preparatory to their quitting this for a warmer climate; their emigration being later than usual. "The swallow," continued he, "generally visits us about the middle of April; and the first brood is brought ont in June, the second at the end of August. It is a bird of passage; its arrival and withdrawing from this island depending a great deal on the fineness of the summer, though a few do certainly remain with us in a torpid state throughout the winter months.

"We have several other birds of passage which frequent England at stated seasons, besides those I have already told you of. Among them are the NIGHTINGALE and CUCKOO. The former visits our southern counties in May, June, and July, singing most melodiously after sunset; its notes being overpowered during the day by the louder ones of other birds. It is not by any means beautiful in its plumage, being something like a reed sparrow; and is supposed to pass the winter in Persia and Eastern Asia.

"The cuckoo comes about April, and quits us the beginning of July. It never builds a nest of its own, but deposits a single egg in that of a hedge sparrow, or other small bird; and the young one is scarcely hatched, before it turns out the natural offspring of its foster parent, and thus becomes the sole charge."

During dinner, Julia was much pleased with her

brother's account of his morning's amusement, and a repetition of what he had heard about sharks, cuckoos, &c. ; and begged her papa to relate any thing else he knew concerning them, which he most willingly did. Afterwards she asked, what the **LINEN CLOTH** was made of which covered the table ? and heard from her mama, that it was manufactured of the fibres, or bark, of a slender hollow plant called flax, which grows about two feet high, in a rich soil, and is much cultivated in Flanders. Cambric muslin and lace are likewise formed from the finest threads of the same plant.

“ When linen becomes too old and worn for farther use, it is torn up into rags, beat into pulp, and converted into **PAPER**. The first mill for which purpose erected in England, was in 1588, at Dartford in Kent, by a German named Spilman ; but the article had been manufactured on the Continent long before.

“ The ancients used to write on the broad leaf of a rush very common in Egypt, called papyrus ; from which the modern invention of paper evidently derives its name. The natives of some parts of India make use of the leaves of a tree for the same purpose ; though their intercourse with Europeans has now very generally introduced linen-paper amongst them.

“ You see, my dear children,” said Mr. Acton, “ of what vast benefit trade and mutual intercourse

is to every nation on the globe ; as there is not one which does not possess some art worth imitating, or some production adapted to the improved inventions of civilized society.

“ If luxury and factitious wants have kept pace with the ingenuity and progress of the human mind, let us also remember, that the industry necessary to supply such demands has been the principal cause, why the inhabitants of Europe hold so proud a pre-eminence over the rest of the human race.

“ From the best accounts that have been received, the extensive and populous empire of China was as far advanced in civilization and the arts many hundred years ago as at the present moment. And thus, from the obstinate rejection of all commerce with other people, she has cramped the energies and straitened the means of subsistence of her natives ; so that the most destructive famines are constantly occurring, and infanticide is even encouraged by the established laws.”

After the cloth was removed, and some fruit placed on the table, Mrs. Acton remarked, how grateful to the palate a melon must prove in the warmer climates ; and that it had been brought to Italy from Armenia about sixty-eight years before the birth of our Saviour, though not cultivated in England till 1520. She desired her son to take some pepper with the slice she had given him, to correct its crudeness, and said. that snice, together with

croves, nutmegs, and ginger, came from the Molucca Islands in the East Indies.

Questions were soon after asked by the children concerning the other fruits they were eating for dessert ; and they were told, that the apricot was brought to Italy from Arabia, and introduced here in 1524, by Henry the Eighth's gardener ; that walnuts were produced by a remarkably beautiful tree, first planted in England during the reign of the same prince ; the dried plums were imported from Portugal and the south of France ; and the figs from Spain and Turkey.

" The WALNUT TREE," continued Mr. Acton, " is a native of the northern parts of Persia and China ; and its wood takes so beautiful a polish, that the stocks of fowling-pieces are generally made of it ; and our ancestors used it very much also for furniture and cabinet work."

As the winter advanced, the wetness and severity of the weather often confined the happy family of Woodland Cottage to the house ; and during those periods, one of the amusements most eagerly sought after by the children, was the MICROSCOPE. New objects for examination were never wanting ; and not a drop of vinegar, or water, or even a grain of dust, ever failed of presenting some wonder of nature to their inquisitive research.

The first time they viewed the wings of a moth and butterfly, their admiration was excessive at

finding the down, which appeared like minute dust to the naked eye, became distinct feathers when seen through the microscope. On one occasion, their mama desired them to look through the glass at what they conceived to be a most horrible monster, but which they found nothing more than a common SPIDER, when examined without being magnified. "Why, mama," exclaimed Julia, "I could not have believed this to be the same insect I have so often passed unnoticed. It has eight feet, and two arms or feeders, besides several eyes; its body and legs are covered with long hair, and its whole appearance is frightful."

"The spider really is, my love, of a very cruel nature; as they will even feed on each other. There are said to be forty-seven different species of this insect; some have as many as eight eyes, others only two; but all have five openings at the extremity of the body, through which is distilled at pleasure a sort of clammy substance that forms the thread of their webs. These threads, although quite perceptible to the eye, are sometimes the three thousandth part of an inch in width; and yet I have heard, that a silk manufacturer at Lyons, in France, made a pair of stockings of the webs of spiders, which he used to show as a curiosity, and evident proof of his own superior ingenuity.

"It is very amusing to watch the spider when constructing its web! It first distils a long line,

that is carried by the air against some object to which it sticks; and it then draws this thread quite tight before it ventures on it; but finding it safe, goes to the centre and forms its net, which is certainly a most elegant piece of workmanship. In some parts of America, the body of the spider is considerably bigger than a nut; and the webs, when numerous (being composed of threads proportionably thick), become a disagreeable impediment to those persons who travel much through the woods."

Mr. Acton being fond of SKAITING, was anxious to teach his son to excel in that healthy exercise; and accordingly their skaits being got into proper order, William impatiently examined the ice every morning, to find whether it was strong enough to bear them. Julia frequently accompanied her brother in these rambles to the ponds, who told her how the Dutch women skaited to market with their baskets of eggs on their heads; and being well wrapped up, she found both her health and appetite improved by the keenness of the air.

One day they were so struck with the beautiful appearance of the hoar-frost, that they insisted on their papa and mama walking out with them after breakfast. Every tree and shrub, even to the most delicate fibres, was covered with crystallizations of the purest white; and from that circumstance,

though the atmosphere was very gloomy, there was yet something peculiarly interesting in the scene.

Mr. Acton shook a bough, and then picking up a handful of the hoar-frost, made his children remark, that each minute particle was a crystal of water placed at angles of 60 or 120 degrees. "Snow and ice," he observed, "were also formed in the same manner. Crystallization is produced by the slow evaporation of water; and ice is always fresh when dissolved, even in the frozen seas, as the salt sinks to the bottom before the water begins to freeze. Cold water is said to be heavier than hot; but why it is so, I do not feel myself competent to explain; any more than the reason why a vessel should hold a greater quantity of liquid at 39 degrees of temperature, than if it is either hotter or colder.

"One of the most wonderful properties of water, however, is its not being compressible into a smaller bulk; so that if an iron cylinder with a piston at the top of it, is made extremely strong and quite filled with water; by throwing in more, drop by drop, with a force-pump, the piston must either rise with any weight attached to it, or else the iron vessel will burst. I have seen large trees forced up by the roots, piles of wood out of the ground, and other things of the same nature, by the application of the above power; which is certainly one of the most simple and efficient we possess.

“ I must not forget to tell you, Julia, of a palace, which was built entirely of ice at St. Petersburg, in the year 1740. It had apartments and windows, vestibules and colonades, exactly as in stone architecture; and I believe a magnificent fête was given in it when finished, by the Empress of Russia, who also caused it to be brilliantly illuminated.

“ We ought now to return home, our walk being rather a long one; and I will lend you a book this evening, which contains a full account of the above artificial curiosity.”

The frost continuing some weeks, William became tolerably expert in the use of his skais, and assisted by his father, made a sort of chair with two pieces of steel fastened to the legs. In this he used to get his sister to sit, secured from the cold by a warm cloak and muff, and skating behind it with his hands on the back, pushed it swiftly along the ice. Mrs. Acton had described this little machine to her children, when she was once giving them an account of her drives along the frozen canals in Holland, in a *traineau* drawn by one horse, during an excursion she had made to that country with her husband; and her son most unexpectedly gratified his sister a few mornings after, by giving her one of those novel kind of rides. William asked his father one evening why the rumbling of cart wheels and all other noises were so much more distinctly heard at a distance during

a hard frost, than at other times: and was informed that it arose from the air being then more elastic. "SOUND," continued Mr. Acton, "moves at the rate of 1142 feet in a second, and is conveyed to a greater or less distance, according to the elasticity of the medium through which it passes; but light travels about 170,000 geographical miles in the same period of time, and is only eight minutes or a little more, passing from the sun to this earth. Thus the distance of any thunder storm or other explosion, may be calculated to a nicety, by observing the number of seconds which elapse between the flash and the report, and then multiplying by 1142 for feet.

"The properties of AIR are very curious; and I will endeavour to amuse you this evening, by explaining some of those best known. The atmosphere which surrounds this earth and refracts the rays of light, extends to the height of forty-five miles; and is equal in weight to a flood of water thirty-two feet deep. The air which a middle sized man sustains on his body, is above thirty thousand pounds; but then the spring of an equal quantity within him, counterbalances the weight, and he is insensible of any pressure."

"Now papa is surely joking!" cried the two children to their mother; but she assured them he was not, and recounted a number of experiments she had witnessed at different times, of pumping

the air out of a vessel over the mouth of which was tied a bladder ; when the pressure of the outward air would burst it with great violence.

“ Air,” resumed Mr. Acton, “ is capable of being expanded to a very great degree ; as is shown by the inflammable air used to fill a balloon, which is six or seven times lighter than the common ; and distends the silk almost to bursting when at a considerable elevation above the ground, although, perhaps before ascending, the machine was not two-thirds full. Another fact which will also excite your incredulity, is that all bodies are of the same weight where there is no air to resist their passage ; thus, a guinea and a feather will fall equally fast in an exhausted receiver.”

“ Well, papa,” said William, “ you have told us so many odd things to-night, I feel quite confused, and almost ashamed to ask any more questions ; but it has always struck me as very singular when I have been sitting in a dark room, that the instant a small candle has been brought in, the whole room should be immediately lighted.”

“ A candle, my dear boy, will in one second of time put in motion a sphere of light four miles in diameter ; therefore, you need not be surprised at its lighting a room instantaneously. But what I think a much more astonishing circumstance is, that some kinds of perfumes may be exposed for many days to the action of the air, and scent every thing

round during that time, yet not lose a thousandth part of a grain in weight."

On one of those wet cheerless days towards the end of winter, when nothing could be done out of doors, Mrs. Acton produced what she said would amuse her son and daughter the whole morning, by being examined through the microscope. The first was the mouldiness on a lemon; which when magnified had all the appearance of the most active vegetation, each particle being a perfect plant. They next looked at a small bit of paste which had been put into vinegar, and found it animated with eels, differing both in size and shape. When tired of these, some small insects called water-newts were placed under the glass, in the bodies of which the circulation of the blood was plainly discernible.

Their attention was afterwards attracted by the mites of a cheese, the sting of a bee, the scales of a perch, the point of a needle, small pieces of cork, sponge, and various other substances as their fancy directed. Hours slipped away unmarked during this pleasing occupation; and Julia expressed regret at being obliged to put up the instrument and prepare for dinner, though she did not on that account make the less haste to do what her mama desired.

During dinner Mrs. Acton asked her son, what objects he had been most gratified with looking at through the microscope? and he replied with the scales of the perch and the thin piece of cork.

Julia declared herself more delighted with the plants which appeared growing on the mouldy lemon ; but begged to know, if cork was not the bark of a tree.

“ Not exactly,” said her father ; “ but an excrescence formed on the outer bark by exudation ; which binds it so tight, that if not stripped off when the tree is about twenty years old, and every ten years after, the timber decays and dies in sixty, instead of living two hundred years. The tree which produces this curious vegetable is a native of Spain and the south of France.”

When the family party had drawn their chairs round a blazing fire, William mentioned that he had lately read of a very extraordinary tree found in India, called the BANYAN ; the boughs of which bent down to the ground and took root, forming other stems, the branches of which did the same thing ; so that in the course of a few years, a whole grove of leafy arches was formed from one parent stock. He asked, whether we had any vegetable productions in Europe which could vie with it ?

Mrs. Acton said she believed not, as neither the soil or climate could be compared to those of Asia in their fertilizing qualities ; still there were some extraordinary specimens of the age and growth of timber, even in this quarter of the globe. “ The beautiful tree we call the Spanish chestnut, is said to have been first brought from Asia Minor by the Greeks when they burnt Sardis, about 504 years

before our Saviour ; and the wood is equal in durability and value to the oak. There is one of them growing near the foot of Mount Etna in Sicily, supposed to be the largest tree in the Old World, being, it is said, a hundred and sixty feet in girth.

“ In Gloucestershire, I am told, is one of fifty-two feet round the trunk, which was a remarkable tree as long back as the year 1160, in King Stephen’s reign ; and by traditional accounts, is 1100 years old. Another, planted in the year 1216, at Wick-war in the same county, is seventy-five feet round. Some oaks have likewise grown to an enormous size in this island. That of Fairlop, in Epping Forest, used to be visited as a curiosity, till it was accidentally set fire to and burnt, by a party who were dining in its hollow trunk ; but I forget its measurement : though I have no doubt it was as large as that of Bodington near Cheltenham, which was fifty-six feet in circumference and 600 years old, when maliciously destroyed in 1790.

“ The chestnut tree was brought to England by the Romans, very soon after their invasion and settlement here ; and as the wood neither shrinks or swells, it was in great use among our forefathers, the roof of Westminster Hall and many other edifices being built of it. There has been a variation of this tree brought here since 1588, called the horse chestnut ; the fruit of which is not good to eat, but makes excellent starch.”

"I believe, mama," said William, "that no wood known, is so durable as the cedar of Lebanon, on account of its bitter taste, which prevents worms from eating into it. I have seen a statement in one of papa's books, of some cedar beams found in the temple of Apollo, at Utica in Africa, 2000 years old, and still sound." "I dare say," replied his mother, "the anecdote is true; but the durability of all timber depends a great deal on what it is exposed to. For instance, elm never rots while under water, or kept from the air, and is therefore used for the keels of ships and water pipes; but if exposed to the atmosphere, it decays rapidly."

"Well!" exclaimed Julia, "I don't know any thing more cheerful than sitting round a large fire and talking. But I should like to know what coal is, and how its usefulness as fuel was first discovered." "There has been a great difference of opinion on the subject," said Mr. Acton; "but it now seems generally admitted that coal is a vegetable fossil. The first mention of it in our history, is in a grant of some lands made in the year 852 by the abbey of Peterborough, when the father of Alfred the Great was on the throne; and in 1272, Henry the Third granted a charter to the people of Newcastle, with the right of digging this substance. It was burnt in London in the reign of Edward the First; but the smoke arising from it was erroneously thought so pernicious."

ous that the use of coal was forbid by proclamation ; and it did not come into general consumption till the time of Charles the First, when it cost seventeen shillings the chaldron.

“ The trade between London and Newcastle in coals, by employing a great number of small vessels, has long been considered one of our best nurseries for seamen ; and the inhabitants of the metropolis are therefore prevented by law from burning that which comes from Staffordshire and the inland counties.”

“ I think, papa, you stated the price of a chaldron of coals, in Charles the First's reign, to have been only seventeen shillings,” remarked William ; “ was not that excessively cheap ? ” “ I should think not, my dear boy, when you take into consideration the much greater scarcity of money in those days, consequently its increased value ; and the rarity of becoming possessed of even a small sum.

“ When William of Normandy invaded England in 1066, the prices of many articles were only as follows ; and yet I much doubt if there was not more difficulty in purchasing in those days than at present :—an acre of land was one shilling ; a hyde, or 120 acres, five pounds ; a man slave, three pounds ; a riding horse, one shilling ; a cow, four shillings ; an ox, six shillings ; and a sheep, one shilling.”

When her husband had done speaking, Mrs.

Acton desired her son to ring the bell for tea; but before he could obey, Julia begged her mama to answer one more question first. "Some days back, when William and myself were walking, he pointed out an enormous arch over a field gate, which he said was formed of the two jaw-bones of a fish; but I thought him in jest, and was only convinced the substance was not wood, by closely examining it. Be kind enough to give me an account of the fish which possesses so monstrous a mouth."

"It is a WHALE, my love! the largest of all animals, as it is frequently seventy or eighty feet long; and is caught in the frozen seas, chiefly for the sake of the oil which is extracted from its fat or blubber. The bones which adhere to the upper jaw are likewise valuable articles of commerce from their flexibility and toughness; some of them are four yards in length, and about 500 are generally long enough for the use of stay and umbrella makers, as well as other tradesmen.

"The whale fishery is rather a dangerous employment; not only from the vast masses of ice which sometimes crush the ship, but from the bulk of the animal itself. It is found sleeping on the surface of the water, and a boat being silently rowed alongside, the fish is struck with a harpoon or dart that has a cord 400 yards long attached to it. The whale, on feeling itself wounded, immediately darts off, either at once to the bottom or in a

horizontal direction ; and with such violent rapidity that the rope fastened to the harpoon is constantly wetted to prevent its taking fire ; while a man stands with a hatchet to cut it in two, should any obstruction prevent its running out ; otherwise the boat itself would be dragged under water.

“ The poor animal soon gets fatigued, and rises to the surface to breathe ; before it spouts out water to a great height from two holes in its head, bellows with agony, lashes the sea into a foam with its tail, and is at last cautiously approached and killed.

“ There is another species of this fish caught in the southern latitudes, called the spermaceti ; which produces a more valuable oil, though not near so large an animal.”

Mr. Acton mentioned to his son, before they retired to bed, that when he came from school the next summer vacation, he intended taking him to pay a visit to his uncle in London. But that as it would be impossible to let Julia accompany them, he must promise to write his sister a full account of every thing remarkable he might see or hear. William was highly delighted at the thoughts of the journey, only regretting that his mother and Julia were to be left behind ; but he assured them they should constantly receive very long letters from him ; and Mrs. Acton remarked, that perhaps the summer after they might all take an excursion together

Weeks and months soon passed away with the happy family, in the same constant routine of rational amusements; and on William's return home, his father bid him be ready to start the third morning at daylight, as he intended driving him to Gloucester in a gig. The leave-taking, as is usual among affectionate relations, was melancholy; and it was a considerable time before much conversation passed between the father and son, though the former did not fail to point out the island of Alney, formed by the Severn; where Edmund Ironside and Canute the Dane, in 1016,<sup>3</sup> disputed the kingdom in single combat.

On entering the flourishing city of Gloucester, Mr. Acton said it had always been a place of importance from the richness of its environs, the Britons and Romans having each occupied it as a station; and in the year 1643, it had successfully resisted the army of Charles the First. Putting up their gig at one of the inns, William begged to walk first to the cathedral, with the elegant interior of which, its carved stalls, whispering gallery, and cloisters, he was highly gratified. He also remarked the tomb of the unfortunate Edward the Second, who in the year 1327 was murdered at the neighbouring castle of Berkeley.

The handsome and convenient county goal next attracted their attention; which is one of the best conducted in England. But the pin manufactory

particularly pleased William ; as he there saw each of those little implements go through the hands of twenty-five persons, before, from a state of rough brass wire, it became fit for sale.

He asked his father why the same individual was not allowed entirely to finish one pin ; instead of only performing a very small portion of the process, and then giving it to another workman : when Mr. Acton explained, that it was by the division of labour alone, the British had attained to such a high degree of perfection in their manufactures, or could furnish such vast quantities of the same article to all parts of the world.

A drive through a luxuriant vale brought the travellers to the large, well-built town of Cheltenham, which possesses one of the most celebrated mineral springs in the kingdom ; and a few miles beyond, on the summit of a very high hill, Mr. Acton stopped the chaise to point out to his son the various beauties of the country they had passed, and particularly the blue hills of Malvern which bound the landscape.

Oxfordshire, though richly cultivated, does not present many picturesque points of view ; and William began to get heartily tired by the time they had reached the magnificent domains of Blenheim. There, however, he was roused by the remarks of his father, who recalled to his mind the splendid victories of Marlborough in the reign of Queen

**Anne:** and the nation's gratitude to that accomplished general for his complete defeat of the French and Bavarians in August 1704.

At Woodstock Mr. Acton pointed out the old house said to have been inhabited by Chaucer the poet; in the reign of Richard the Second; and mentioned that the chief trade of the town was in gloves.

On first entering the park, William was astonished at the extensive pile of **BLENNHEIM HOUSE**, which appears indeed to the greatest advantage from that distance, as although a most splendid, it is a very irregular building. The fine timber and lawns, the noble sheet of water which seems to lose itself among overhadowing groves, the handsome stone Bridge and delightful pleasure grounds, in turn attracted the attention of the happy boy; but when his father led him to a cedar tree near the spot called **Rosamond's bower**, where the fair mistress of Henry the Second is said to have been concealed, he was so much interested in the story, and gratified by the responses of the echo for which the place has long been noted, that he begged they might sit down on the turf till his curiosity was exhausted.

Mr. Acton willingly indulged him; and desiring his son to observe how pleasingly varied the scenery of the park was, said it had always been a favourite residence of our princes from the earliest periods of the Saxon Heptarchy. "In regard

to the fair Rosamond," continued he, "it is related that her retreat being discovered to the jealous queen, she presented a dagger and a bowl of poison to the choice of the unfortunate beauty who had captivated Henry; and after having thus rid herself of a rival, excited her own sons to open rebellion against their father."

William tried the effect of the echo over and over again; and asked if any were known to be superior to it? "Yes, a great many no doubt," was the answer; "but at this moment I only recollect two—the one at Rosneath on the Clyde, about seventeen miles from Glasgow in Scotland, which repeats a tune three distinct times, according to the accounts of travellers; the other is in Italy, which Addison states to have repeated the report of a pistol no less than fifty-six times."

The paintings, furniture, China vases, &c. of Blenheim House, formed the conversation of the travellers on their road to OXFORD, but when the spires of that beautiful city were seen in the distance, William could talk of nothing else.

"You will shortly enter, my dear son," remarked Mr. Acton, "one of the most celebrated places not only of this island, but all Europe!—An university founded by our great king Alfred, where learning has flourished for many centuries, and which, with Cambridge, has produced a large proportion of the most eminent men in literature, that ever lived."

After walking down High-street, between buildings of the most antique and venerable appearance, visiting the various colleges, the Bodleian Library, the Theatre, Observatory, and shady avenues on the Isis, Mr. Acton asked his son, if he could imagine it possible to find a more magnificent and imposing town in the whole world than the one they were now in.

William readily assented that he could not, and begged his father to give him an account, when they had dined, of the first invention of PRINTING ; as he had never fully understood or even reflected on the great value of that art, until he had minutely examined some of the manuscripts which had been shewn him at Christchurch.

When the cloth was removed, Mr. Acton referred to the subject by saying : “ You have indeed questioned me on one of the most useful discoveries of mankind. An improvement which has raised the present inhabitants of the civilized world as far above the boasted nations of antiquity, in the knowledge of the arts and sciences ; as Christianity has done, in the moral relations of duty between man and man.

“ Without the invention of printing, the blessings of a pure religion could not have been diffused so widely, or had so excellent an effect ; for when the copying of a book was the effort of so much time and labour, and no other than traditionary

accounts were preserved among the people, it was easy for a set of designing monks to keep princes and kingdoms in a slavish ignorance.

“ In the year 690, Aldfred, king of Northumberland, gave 800 acres of land for a written book ; and so few among the nobles or bishops of our Saxon ancestors could write, that the phrase of ‘ signing ’ instead of subscribing one’s name, has been handed down even to the present time.”

“ The origin of printing is involved in some mystery, many being anxious to lay claim to so ingenious an invention. But the most popular account is, that in the middle of the fifteenth century a native of the town of Mentz in Germany, named Faustus, undertook at Paris to write as many copies of the Bible as were wanted, at a tenth part of the price usually given. The beauty and exact similarity of all those he sold, first excited the astonishment, and then the superstitious fears, of the inhabitants ; and the poor German was forced to betray his secret to save his life. This gave rise, William, to your favourite story when a child, of the ‘ Devil and Doctor Faustus.’

“ I have heard it asserted, that wooden types for printing were used in this town of Oxford, where we are now sitting, as early as the year 1468, which was very soon after the invention of the art ; but William Caxton has the honour of being the first person who established a press for metallic types

in England, and that was within the precincts of Westminster Abbey in 1471, when Edward the Fourth was on the throne. This important event took place little more than a hundred years after Wickliffe had translated the Bible into English, and opposed the supremacy of the Pope; and the people being now enabled to attain knowledge, the Reformation soon followed."

"The next morning, William's sorrow at quitting the noble city of Oxford was not a little increased by the uninteresting country they had to pass over; at last however, after descending a very long hill, he got sight of the delightfully situated town of Henley, and the pleasing banks of the Thames. This is indeed a lovely view, dear father," said he; "how well wooded and varied the hills and valleys are, with the river winding at the bottom. How very different from what we have lately seen!"

The prospects which inclose the Thames in this part, continued to attract his admiration; and particularly that from Maidenhead bridge of the woody cliffs at Taplow and Cliefden; but not long after, the proud turrets of Windsor Castle, rising far above every other object, quite rivetted his attention.

Mr. Acton got out of the chaise at Eton; and desired the driver to secure them a room at the inn in Windsor, while himself and son walked about and amused themselves. There is something very striking and venerable about the chapel and

buildings of Eton College," remarked William, "though they are certainly not so splendid as those we viewed yesterday. I believe it was founded and richly endowed by the unfortunate Henry the Sixth, and has long been a school of the first eminence in the kingdom."

"You are right," replied his father, "and we will first visit the excellent library belonging to the establishment, and then look at the upper school room, where I have often been gratified at finding cut out in the wainscot, amongst thousands of others, the names of many of the greatest statesmen and commanders in British history."

The immense pile of buildings which crown the heights of WINDSOR, erected in various ages and styles of architecture, gratified William's curiosity for some hours. The terrace and slopes, the paintings, extensive views and inequalities of the surrounding parks, and the Round Tower where the kings of France and Scotland were confined by Edward the Third, in turn became the object of his attention; nor did Mr. Acton omit taking him to see the exquisite carved stalls in St. George's Chapel, or the dead tree called Hern's Oak, mentioned by Shakespear in his *Merry Wives of Windsor*.

The next morning, in order to gratify his son more completely, Mr. Acton desired the post-boy not to take the direct road to Staines but to drive

up the magnificent avenue called the Long Walk, which is nearly three miles in length, and then take a circuit through the beautiful woodland scenery of the park. William had thus an opportunity of seeing the large thatched building called the King's Lodge, the conservatory and pleasure grounds of which are particularly pleasing; and a few hundred yards to the left of Bishop's Gate, where they quitted the park, his father pointed out a vista among the trees which commands one of the finest views of the castle imaginable.

On a rich meadow watered by the Thames, Mr. Acton stopped the chaise and said, this is Runnymede; famous for having been the spot where, in 1215, King John was forced by his barons to sign the Magna Charta, which is the foundation of our constitution and liberties. Then pointing to a small ruin in the gardens of a gentleman's house close to the river, he stated it to be the remains of a religious house in which Anna Bolëyne at one time resided before she became queen to Henry the Eighth.

At Hampton Court palace, which was founded by Cardinal Wolsey, but principally built by king William the Third, Mr. Acton showed his son the celebrated Cartoons of Raphael; and also the formal style of architecture and gardens adopted by the French and Dutch at the latter end of the seventeenth century.

On approaching Richmond, William expatiated on the numerous accounts he had heard of the beautiful prospects from its hill; and his father assured him, that without wishing to raise his expectations too far, it certainly did command views of one of the richest scenes of cultivation and loveliness he had ever witnessed. The afternoon was fine, and William was not disappointed. After rambling about the environs of this much-frequented spot, his indulgent parent consented to gratify him still farther by proceeding to LONDON in a boat.

Who can describe the British metropolis! its numerous curiosities and places of public amusement; its wonders of art, for convenience or trade; its docks, bridges, and manufactories; scattered as they are, over an extent of nearly six square miles!

William, in his letters home, said he was at a loss where to begin his narrative! He ran over an account of Saint Paul's, the Monument, Westminster Abbey, and the beautiful Gothic chapel of Henry the Seventh, the houses of Parliament, theatres, exhibitions, squares, and parks, without much trouble. He told Julia that London was founded soon after the days of Julius Cæsar, and shortly became the capital; that it was first walled round by Constantine the Great; and the bridge first built of stone about the year 1163, in the reign of Henry the Second. But when he began to write about the sewers which drain, and the

many hundred miles of pipe which light and supply with water this immense city, he acknowledged himself wrapped in astonishment.

His father and uncle were equally desirous he should see as much as possible during his visit ; and the former being anxious to lead his son's mind to dwell on the advantages and honourable occupation of trade, lost no opportunity of mentioning how little the government of ~~this~~ free nation had to do with the embellishment and beauty of the metropolis.

In one of their walks, Mr. Acton pointed out Waterloo Bridge, as the most noble work of the kind ever erected ; and then remarked, that, similar to the East and West India Docks, and many other splendid establishments, it was constructed at the expense of a company of merchants.

Another time, having taken William to Guy's Hospital, and made him perfectly acquainted with its extent and utility ; he said, "The public are indebted for this to the munificence of a tradesman."

One of the manufactories in London with which the young visitor was most delighted, was that of Mr. Huddart, at Limehouse, for making ROPES ; the whole of which is conducted by machinery. He there saw, for the first time, that wonderful piece of mechanism the STEAM ENGINE ; and took much pains fully to comprehend the manner in which the air and steam severally acted on the piston.

His surprise at being told, that steam is capable of occupying fourteen thousand times the space it did in its state of cold water, was very great ; nor could he sufficiently admire the regularity with which five or six hundred small cords were twisted round a common centre, so as to make the strain on every part of the rope equal. And when he saw three of those ropes compactly bound together for a cable, he thought it impossible that any ship so held, should part from her anchor.

It may easily be conceived, that in pursuance of his plan to impress his son with the commercial importance of his native country, Mr. Acton did not fail to take him in a boat below London Bridge, where the multitude of vessels is so great, that their masts almost resemble a grove ; and numerous steam-boats are seen moving against both wind and tide.

The Royal Dock-yard at WOOLWICH gave William an excellent opportunity of observing the general construction of ships ; and enabled him to inspect every part of those enormous floating batteries, to which this country mainly owes her conspicuous rank in Europe. While the many thousand pieces of ordnance lying in the arsenal, the casting and boring of brass cannon, the collections in the model-room, and the repository near the artillery barracks, allowed him some insight into the power and resources of our military establishment.

Nothing could exceed the proud feelings of his heart, when the magnificent stone building of Greenwich Hospital was stated to be appropriated to the residence of twenty-seven hundred disabled seamen ; and that upwards of thirty thousand out-pensioners, received a yearly income from its funds. In the evening, when William was giving an account of the gratification he had enjoyed in that day's excursion ; he told his uncle, that after what he had seen, he was almost tempted to doubt the truth of what he had read concerning the insignificance of the Thames as a river. " And yet," replied Mr. Acton, " it really is contemptible in size compared to rivers of great continents.

" The Wolga, which is the largest in Europe, runs a course of 650 leagues, and discharges its waters into the Northern Sea by seventy mouths. The Danube, the Don, the Nieper, and the Dwina, are from three to five hundred leagues in length each ; but even they are inferior to the Ganges, the Euphrates, the Nile, and some other rivers of Asia and Africa.

" You seem astonished, William, at such immense volumes of water rolling down to the ocean ; and perhaps would wish to ask, how it is the sea never overflows. That forms one great feature in the economy of nature ; for a vast quantity is evaporated by the sun, which not only moistens the earth in rain and mists, but supplies those springs

on the tops of mountains where rivers take their rise.

“After those I have enumerated, what will you think of the rivers of the New World, which far surpass them in grandeur. That called the Amazons, runs 1200 leagues from the Andes quite across South America, before it reaches the Atlantic ; and is 150 miles wide at its mouth. The St. Laurence is 900, the Plata 800, the Oronoko and Mississippi upwards of 700 leagues each in length ; and they receive a vast number of tributary streams, all of them far bigger than the Thames.”

A short pause ensued, when William recommenced the conversation, by saying, “if you are not quite tired of my questions, uncle, do explain to me the nature of tides, for I did not exactly comprehend the boat-man to-day ; who, when I was remarking on the great fall at London Bridge, assured me, high tide was full a quarter of an hour later above than below it ; the obstruction to the free passage of the water being so great.”

“Tides, my dear nephew, are principally caused by the attraction of the moon, though the sun has likewise some power over them ; and, consequently, when both the sun and moon draw in the same direction, we have spring, or high tides ; but when their attractions are opposed to each other, the neap, or low tides take place. The recurrence of the tides is very exact, two in every twenty-five

hours, which no doubt gave rise to the name among our ancestors, as *tid* means time in the Danish language to this day."

The British Museum, of all the places in the metropolis, was the one most frequently visited by Mr. Acton and his son; as its vast collection of antiquities, minerals, petrifications, and other articles, afforded them an inexhaustible fund of amusement on rainy days. The Portland vase, the medals, and the valuable library, were all examined; and the various treasures collected in the saloon, gave occasion to many an agreeable conversation.

A specimen of amber, inclosed in which is a perfect fly, particularly pleased William; and soon after, he begged to be informed concerning the contents of a glass case he was then looking at.

"That is a diamond," said his father, pointing to a brilliant stone, white like a pure drop of water; "it is the hardest and most valuable gem known, and can only be cut with its own dust, though perfectly inflammable. They are found in the East Indies and Brazil, either in mines or the sand of rivers; and great care is taken to prevent those employed in their search, from swallowing or otherwise concealing them. The Russian diamond weighs 779 grains; but the largest known in the world, belongs to the King of Portugal, and was found in Brazil. It weighs 1680 grains, or  $3\frac{1}{2}$  ounces, and

has been valued at 224,000,000*l.* sterling ; though of course the price of such a commodity must be completely arbitrary. Near the diamond, are specimens of gold and silver ore, as found in the mines ; and I need scarcely remind you of their great utility as a circulating medium in commercial transactions. They are both very heavy ; and their ductility is such, that silver wires are made for astronomical purposes the 750th part of an inch in diameter." After observing several other metals and precious stones, Mr. Acton called William to look at a species of iron ore, which he told him was the loadstone, so distinguished in its property of pointing to the poles of the earth, and communicating the same by touch to iron. "The attractive power of this stone (or as it is more commonly called **MAGNET**)," continued he, "was certainly known to the ancients, as several of their writers mention it ; but its directive power, from which is formed the mariner's compass, is said to have been first taught in Europe by Marco Polo, a Venetian, in the year 1260, who had become acquainted with it during his travels in China.

"Previous to the important properties of the magnetic needle being discovered, sailors rarely ventured out of sight of land ; and, consequently, nautical science was too much cramped in its operations to make much progress. But since, what a vast

field has been opened to the intrepidity and research of mankind ; and what changes it has wrought in the civilization and prosperity of nations.

“ In 1492, Columbus boldly sailed across the trackless Atlantic, and displayed a new world to the astonished inhabitants of this. In 1497, the Portuguese doubled the Cape of Good Hope ; and by thus discovering a different channel of communication for the valuable commodities of India, annihilated the commerce which had for ages been carried on overland, or by the Red Sea, and removed the emporium of trade to western Europe.

“ The dipping needle, invented in 1576, by Robert Vorman, an Englishman of Wapping, is an improvement on the old compass ; and from constant attention and experiments, the nature of the magnet is now so well understood, that the ocean is explored in many thousand directions, with almost as much safety and certainty as the land itself.”

On entering the room appropriated to British birds, William was surprised at observing so many different sorts in the collection ; and was rather incredulous at hearing there were two hundred and fifty-two species found in this island. The superb peacock, which though domesticated with us, is found wild in Ceylon and Java, and was brought from thence to the court of Solomon, gratified young Acton by the brilliancy of its colours ; and he was much amused in contrasting the golden eagle,

- which measured three feet in length, and eight between the tips of its outstretched wings, with the golden-crested wren, which is little more than an inch long.

William and his sister had heard and read a great deal in their childhood about the Tower of London : so that an idea of its consequence was associated in their memory with the historical events of their native country. Julia, in her letters, had often asked questions relative to so ancient a fortress : and her brother begged he might not return home without visiting it.

The first sight of the place greatly disappointed him, as it was so choked with paltry buildings as to look more like a small town than a citadel. The White Tower, however, which remains nearly in the same state as when first erected by the Conqueror in 1081, really did answer his expectations. Its massive walls, eighteen feet thick, its Norman chapel, and ancient wooden chamber, called the Council Room, both at present filled with records and ancient manuscripts, amply rewarded his curiosity. When in the latter, he almost fancied he heard Richard the Third and his partisans, condemning Buckingham, Hastings, and others, to be beheaded in the court below.

The various weapons taken from the Spaniards, at the time their armada made the fruitless attempt on England ; the different sorts of armour

worn by our ancestors before the use of gunpowder," and exhibited on a series of cavaliers who represent our kings, were declared by William to be extremely interesting; nor was he otherwise than gratified by the sight of the crown jewels, which were shown off to great advantage in the new apartment appointed for their reception.

The objects, however, which delighted the young visitor the most, were the writings against the walls of the officers' mess room, supposed to have been performed by many illustrious prisoners who had formerly been confined there; and the magnificent *coup-d'œil* of the large apartment in which muskets for 150,000 men are displayed, in perfect order, and fit for immediate use.

Previous to quitting the Tower, Mr. Acton took his son to the menagerie, where they saw several uncommonly fine lions, some panthers, leopards, and other wild beasts; an assortment of foreign birds, many of them very rare, and all in perfect health and plumage; six or eight boa-constrictors, and other living snakes, twelve feet long; besides a small one so beautifully variegated in its skin, as to have been named the harlequin.

Nearly a month had now elapsed since Mr. Acton had quitted his family; and William, though much pleased with his visit to his uncle, and the kindness he had experienced, began heartily to wish to return again to his mother and sister.

They accordingly parted from their relations in town, and returned at once to Woodland Cottage: where the most affectionate of greetings awaited their arrival.

William's long journey, the sights he had seen, the adventures he had met with, nothing in short which concerned him, was too trifling a circumstance to interest his sister. The conversations of the happy party ran on nothing else; his letters were produced, read over again, and where not sufficiently explanatory, he was called on to supply the deficiency by a further narration.

Mr. and Mrs. Acton rejoiced in the strong attachment which subsisted between their son and daughter. Happy in each other and the love of their children, the temporary separation of the family only made them feel more keenly the delights of a re-union.

"How grateful I am to you, my beloved Emma," said the fond husband, "for having suggested and persevered in a plan for the employment of the leisure hours of myself and children. A few years back, although possessed of every blessing which I ought to have coveted, I was sometimes wayward, often gloomy; and you, as in every other instance though life, saved me from unavailing despondency by teaching me the road to perfect happiness. Besides, observe how cheerfully contented our son is with his situation and prospects. I am certain

he would not change his present domestic circle to belong to the wealthiest family in Britain; and this also is owing to your admirable prudence and tenderness."

The tear of unalloyed satisfaction glistened in the eye of Mrs. Acton, as she listened to her husband's praises; and they continued for some time to talk over the plans which seemed most likely to conduce to William's future advancement.

Fishing, shooting, and other sports of the field, were returned to with increased pleasure whenever young Acton could obtain a holiday to accompany his father; and as the school he attended was at no great distance, it seldom happened that many days passed without his enlivening home by his presence. Reading, conversation, and inquiries concerning the manners and customs of those foreign countries their father had visited in his youth, formed the usual evening amusement; nor was Julia entirely ignorant of the delightful accomplishments of music and drawing, though she did not profess to be scientific in either.

Mrs. Acton had contrived (without endeavouring to vie with, or even enter into the dinner society of the neighbouring gentry) to make her cottage so comfortable and agreeable to all who called, and had likewise on several occasions succeeded in giving, at a trifling expense, such charming rural fêtes to the young people in the vicinity, that the whole

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family of Woodlands was beloved and respected by all classes.

No manor was forbidden to William and his father; no house was shut to the morning calls of any of the party. Indeed such was the serenity of their lives, that the parent almost doubted whether they ought not rather to let William remain in his present state of mediocrity, than expose him to the temptations and misfortunes of the world.

Mr. Acton's dormant ambition, however, revived at the idea of his darling son's superiority; and it was finally resolved, that in another year he should be established in the way of becoming a merchant.

On Michaelmas day, a goose being placed on the table for dinner, William demanded of Julia, if in the course of her reading she had met with any anecdote which would account for that dish being always served up on the 29th of September. "Yes, brother, I have seen it explained by the circumstance of Queen Elizabeth having been eating of a goose when the messenger brought the account of the defeat of the Armada; and she then ordered a similar bird to be placed before her every anniversary of so important an event; which caused the people to adopt it as a custom."

"Come, come, my boy," said Mr. Acton, "I won't have you sneer at a goose. For in addition to its being very good food, it supplies us with pens to write and feathers for our beds; not to mention

the old story of the wakefulness of these birds saving ancient Rome from being surprised by the Gauls. Besides, let me tell you, geese are very handsome in the water; and the swan, which is somewhat of the same species, is by far the most elegant and stately bird which swims."

"By the by," remarked William, "I was much deceived till lately, respecting those beautiful little birds so frequently kept in cages, called canaries; as I had thought, from the name, that of course they were brought from the islands in the Atlantic; but on inquiring, I found by far the largest part was hatched in Germany."

"That may be all very true," answered his mother; "but I should suppose there is no doubt about those birds having been originally brought to Europe from the Canary Isles, and that the Germans have found it worth their while to breed them for sale in their own country."

When the winter became severe, and the ice thick enough to bear, William again took to his skaits; nor did Julia, though no longer a mere girl, refuse to seat herself in the chair, and be pushed about the ponds. Several of their friends in the neighbourhood imitated their example in adopting the same amusement; and thus they formed most agreeable parties on the ice as long as the frost lasted.

"What a remarkably delicious fruit the orange

is," said Julia one day after dinner ; " pray, papa, can you give me any information of when it first became known in England ? "

" It is a curious fact, my love, that so common as this fruit has become, all the trees which exist in Europe have sprung from the seeds of one single plant sent from China to Portugal in 1548. I am speaking of sweet oranges only ; because the Seville, or bitter kind, has always, as far as I know, been a native of Spain. Orange trees will live to a very great age ; and it is even said, that the original one brought from China is now alive in the garden of Count St. Laurent, at Lisbon. In this country they are only cultivated as beautiful plants, the fruit being so very cheap and such a great article of commerce. The lemon and citron trees were brought to Greece and Italy from Asia, and have long been grown in the south of Europe with the greatest success. The red orange from Malta, is the fruit of the plant when grafted on the pomegranate tree."

" Was not the olive, from which the French extract their fine salad oil," said William, " likewise brought to Europe from Asia ? "

" Yes, it came from Syria ; and the tree bears fruit only once in two years. It was planted in Italy about 200 years after the foundation of Rome."

The conversation on fruits and olives continuing, Mr. Acton told his children, that the people in the north of France extracted an oil from the seeds of

poppies, with which they fattened their cattle ; and Julia reminded her brother, of his having in one of his letters promised to tell her an amusing anecdote respecting a painting in Windsor Castle."

" I really beg your pardon for having so long forgotten it, my dear sister. I alluded to a capital piece called *The Misers*, of which there is another at Hagley, in Worcestershire, the seat of Lord Lyttleton ; and the two are so exactly similar, that it is almost impossible to ascertain which is the copy and which the original ; or in fact, to know one from the other, however closely examined. The occasion of this strong resemblance between the two, is said to be as follows. The artist who finished *The Misers* lived at Antwerp, and had a beautiful daughter, with whom a blacksmith (who in those days of chivalry, being employed in making the armour of knights, did not class in the same low scale of society as at present) became deeply enamoured, and demanded her in marriage. The indignant painter repulsed him with scorn ; and pointing to his newly finished piece of *The Misers*, said with a sneer, ' When you can paint like that, then come and ask to marry my daughter.' Love in those days, I suppose, Julia, worked miracles ; for at the end of a year the blacksmith produced the copy so justly admired, and of course gained the lady."

A few evenings afterwards, Julia entreated her

mama to amuse them with a description of some of the most curious kinds of fish, particularly of the pearl oyster; and Mrs. Acton, ever ready to gratify her children, commenced by informing them, that naturalists enumerate no less than 400 different species; some few of which she would with pleasure give an account of. "The gold and silver fish, kept in glass globes as curiosities, are natives of China; and were first introduced to the notice of the British public in 1691. The turtle, or sea-tortoise, is an amphibious creature, found in the southern latitudes. Its flesh is considered a great luxury; and its shell is so strong, that a very great weight may be placed on it without hurting the animal.

"The electrical eel of Surinam is a very singular fish; for whoever happens to touch it, receives a violent shock, similar to that from a powerful electrifying machine. But what will you think, Julia, of the polypus; which, when cut into several pieces, becomes in a day or two as many distinct living animals; or of crabs and lobsters, which when a leg is wounded, have the power of breaking it off, and another grows.

"Of oysters there are a great many varieties; but that which contains the excrescence called a pearl, is chiefly found on the coasts of Persia and Ceylon, and is of a larger size than those we commonly see.

“ The fishery for pearls is both hazardous and uncommon; for it is carried on by men, who with the help of a weight, sink themselves forty or fifty feet under water; and from practice, will remain there many minutes. They put the oysters which they tear off the rocks into a net, which is pulled up into the boat; and when the fish die, from being exposed to the sun, the shells open, and the pearls are found ”

“ You spoke, mama, of an electrical shock when telling us of the Surinam eel; and we do not understand what you meant. Pray explain it to us.”

“ The science of **ELECTRICITY**, my dear children,” replied Mr. Acton, “ is very wonderful, and will require a great deal of attention and reading to be fully understood; as the experiments on it have not only been numerous and highly interesting, but the facts deduced are extremely voluminous. To give you, however, some slight idea of the subject, I will mention a few circumstances that will, no doubt, excite in you both a strong inclination to consult far superior authorities.

“ This earth, and all the bodies we are acquainted with, are supposed to contain a certain quantity of electric fluid, which produces no sensible effect until one becomes possessed of more than its natural share; but then gives rise to lightning, earthquakes, and other phenomena. Some things, such as glass, silk, gums, &c. are non-conductors of

electricity; that is, they will not convey the fluid from one object to another. Therefore, if a glass bottle is covered, inside and out, to near the top, with tin-foil, it may be so completely overstocked with the electric matter, by means of a machine, that in its efforts to get back to the earth, and restore the equilibrium, a very large circle of persons, holding each other by the hand, will receive an instantaneous shock, if one of them grasps the bottle, and another touches the inside of it.

“ The effect produced by the Surinam eel is said to be exactly similar; but proceeds, I suppose, from the sting of the animal. If a kite is sent up into a thunder-cloud, by a small wire, with a bunch of keys fastened to the end, and is held by a silk ribbon, the lightning will run down the wire, and off the keys to the ground, in a beautiful but alarming stream of fire. This shows the utility of having iron rods down the sides of lofty buildings; as the electric fluid always passes to the earth by the nearest way, if the conductor is a good one.”

Neither William nor his sister could think or talk of any thing else but electricity the remainder of that evening; and in reply to their numerous questions, their parents related a variety of pleasing experiments which they had seen performed.

The next day, young Acton set about making an electrifying machine; and with the assistance of a stick, passed through a common quart bottle, and a

little zinc and quicksilver, rubbed on a piece of silk, he had the pleasure, in less than a week, of gratifying Julia with some practical lessons on the subject.

Time passed on without *ennui* at Woodlands; but the whole family looked forward with delight to the summer tour which Mrs. Acton had once hinted at, and now resolved to take, previous to her son's quitting home, for a counting-house. The occupations and amusements of the young people continued much the same as usual; and as they had so long been accustomed to gain information from almost every object they saw, they were never at a loss for information.

Being assembled round the fire-side one afternoon, Julia said, "William and I were discussing a point this morning in our walk, on which we could not agree; and we therefore beg, mama, to appeal to your superior knowledge and decision. One maintained sponge and coral to be animal, the other, vegetable substances; and we both knew so little on the subject, that we could give no good reasons for our several opinions."

"I assure you," replied their mother, "much wiser heads than yours have been long puzzled upon that very question; but both are at last decided by naturalists to be animal substances, having the same relation to the worm or insect united to them, which the shell of a snail has to the creature within it.

Very extensive rocks of coral are found in the Mediterranean and Red Seas, as well as the great Southern Ocean, over which it is beautiful to sail in fine weather, from the elegant forms they assume, and their various colours of red, white, and black. In stormy seasons, the reefs of coral are extremely dangerous, being sufficiently hard to spring a leak in any vessel which strikes them, and destroying the cables of those which may attempt to anchor. Sponge never hardens, but is found growing on the rocks in the Mediterranean and other seas."

"Thank you, mama," exclaimed William, "I perceive I was wrong in my argument; and now allow me to ask my father, how it happens that languages which contain such an amazing variety of words should be formed from alphabets of only a few letters? Surely there must be danger of exhausting the terms necessary, to prevent two things from being called by the same name!"

"I should think not," answered Mr. Acton; "as you forget the almost incredible number of combinations even a dozen figures are susceptible of taking. And yet I should have thought your incredulity would have been completely dispelled before this, in observing the multitude of different landscapes you can form, by moving the cards of that elegant present we brought Julia from London—the Myriorama!"

"In regard to the alphabet, an indefatigable

Jesuit has taken the trouble of calculating, that 24 letters will admit of 5852616738497664000 combinations; and I don't think the English language extends yet to 50,000 words. Therefore, my boy, we may increase the bulk of our dictionary with impunity."

As the time for commencing their excursion approached, Mr. Acton (who wished to unite as much comfort as possible with the economy necessary to be observed) purchased a light open carriage. For he considered, that in a tour of pleasure their daily journeys would be short, and their temporary stoppages frequent; so that the best plan in every respect would be to drive a pair of horses, and take one servant to look after them.

Towards the end of July, when the weather had become settled, and promised to continue fine for some time, the happy party quitted home. And as on this occasion no one was left behind, they started with all the joy which health and spirits could give.

The first place they arrived at, with which they had not been previously acquainted, was Tewkesbury; where they visited the fine old collegiate church; and observed several monuments erected to those who fell in that decisive battle of May 4, 1471, which placed the house of York on the throne.

Views of the fruitful vale of Evesham, and of

the diversified county of Worcestershire, in which the hedgerows are so pleasingly ornamented with pear and apple-trees, brought the travellers to one of the most elegant and regular built cities in the kingdom, where the shops are not much inferior in appearance to those of the metropolis.

The cathedral of WORCESTER is composed of a soft red stone, and is not a very magnificent structure; but the inside is handsome, and contains a splendid tomb to Prince Arthur, the elder brother of Henry the Eighth, which, together with the Chapter House, the Actons thought well worth inspecting. The walks, Bishop's Palace, Edgar's Tower, and the spire of St. Andrew's church, were all looked at and admired; but no object gratified our visitors more than the manufactory of porcelain; which although inferior in the fineness and transparency of its clay to that of Dresden or Sèvres, may now fairly compete, in the design and execution of its paintings, with the china of any other country whatever. A most beautiful service, ordered by one of the Russian princes, on each plate of which was the painting of an English gentleman's country residence, particularly pleased Julia; who conceived a high idea of the taste of that individual, who had thus combined a memorial of British workmanship and British scenery.

When the party was once more seated in the carriage, and remarking on the delightful prospects

around, especially on those towards the river Severn, and the picturesque hills of Malvern, Mr. Acton said he would not occupy their time with an account of the art of making cider and perry, because they were all so well acquainted with it; but he desired them to look at the hop grounds, where the plants were hanging in the most graceful festoons from lofty poles, and altogether had a most pleasing appearance.

“I can fancy,” exclaimed William, “the vines and grapes of Italy forming much such a scene; where you have often told me they are trained against trees and trellis-work. But of what possible use can such an immense quantity of these plants be?”

“Surely, my boy,” replied his father, “you don’t forget how hops were employed in the great brew-house we went to see in London. The foreman there explained that hops were put into beer to correct the clammy sweetness of the liquor. And in regard to the quantity, Kent and Farnham in Surrey are equally famed for their cultivation with this county. It is a plant which will only thrive in the richest soils, requires a great deal of manuring and attention, and is particularly uncertain in its profits; sometimes producing a return far above all other kinds of agriculture, and often ruining the grower by a succession of bad years.”

Before quitting the environs of Worcester, Mrs.

Acton pointed out the memorable field of battle, where the army of Charles the Second was so entirely routed by Oliver Cromwell, on September 3, 1651, that the young monarch himself had great difficulty in effecting his escape from the kingdom.

At the very ancient town of DROITWICH, William and his sister had an opportunity of seeing brine pits, and the salt produced from the process of boiling and evaporation; but their father promised them a much higher gratification during their excursion, in visiting the rock-salt mines of Cheshire. He remarked that salt was not only one of the most useful substances in nature, but might almost be termed an absolute necessary of life; and that in some parts of Asia and Africa, deserts were found sprinkled with saline particles, which seemed to be exuded from the earth.

On arriving at the immense manufacturing town of BIRMINGHAM, Julia was astonished at the crowd and bustle in the streets; nor did she much like the black disagreeable appearance of the houses, but fully agreed in her mother's observation, that the inhabitants, from being generally employed in manly sorts of work, were an athletic healthy race of people.

Mr. Acton was unable to gain admission at Mr. Bolton's great establishment of Soho; but his family was delighted with the premises and shew-rooms of Mr. Thomason, where they saw an amazing

variety of articles in the buckle, plated, steel, and trinket branches of trade, and witnessed the operation of striking medals, cutting glass decanters, &c. The making of buttons and their shanks, with the many pair of hands each of those trifling articles passed through; the manufactories of "papier-maché," painted glass, and the curious process of twisting whip-thongs, were also viewed by the party with great gratification.

In the evening William asked his father how it happened that Birmingham, which was nearly in the centre of the kingdom, and far removed from any large river, should be such a flourishing town for trade; and listened with great attention to Mr. Acton's statement of the inexhaustible mines of coal and iron ore found in the immediate vicinity, as well as the communication by canals with London, Bristol, Hull, Liverpool, and almost every important place in the country.

On arriving the next day at the neat little town of Sutton Coldfield, they walked to the park in order to examine a piece of the old Roman road called the Inekeld Street, which is in good preservation; and afterwards Mr. Acton pointed out from the carriage the village of Wall, which was once an important station, as the Watling and Inekeld streets crossed each other at that spot.

A drive through a well cultivated country, brought

our tourists to the clean, well-built city of **LITCHFIELD**; the cathedral of which they found to be a most richly ornamented pile of architecture, and from having been completely repaired by its bishop soon after the restoration of Charles the Second, in a better state than is usual with similar edifices. Nothing which Julia had yet seen pleased her more than a piece of sculpture by Chantry, which she here met with.

On proceeding towards **Burton-on-Trent**, by a road formed on the **Inekeld Street**, the young Actons felt much interested at the idea of travelling over one used by so celebrated a people as the Romans, at least seventeen centuries before; and the circumstance occasioned an agreeable conversation relative to the ancient history and inhabitants of Britain.

At **DERBY**, the vases and ornaments made of the beautiful variegated spar found in the hilly parts of the county, afforded Julia and her brother several hours' amusement; and they were likewise much pleased with **Kedleston**, the magnificent seat of Lord Scarsdale, which is situated a few miles to the north-west of the town.

A beautiful morning displayed the charming valley of the **Derwent** to the greatest advantage; the interest of the scenery increasing every mile they advanced along an excellent road. But when

they drove through a rude fissure formed in an abrupt rock, and entered the romantic glen of **MATLOCK**, Julia's enthusiasm knew no bounds.

"Oh! do let us stay in this delightful place a few days, dear mama, that I may sketch some of the most picturesque points of view;" and her request was willingly acceded to. The tepid baths, for which Matlock is noted, Mr. Mawe's museum, the extensive subterranean passages, and the well which possesses the singular property of petrifying any substance exposed to the action of its waters, were all objects of curiosity to the young people; but the towering crags which rise above the river, partially shaded by luxuriant foliage, the rural appearance of some of the cottages, and the contrast of romantic and cultivated nature, here happily mingled in the same prospect, delighted them more than any thing else.

In one of their walks they visited the splendid mansion of Sir R. Arkwright; and the machinery for cotton spinning invented by that gentleman, to which he owed his fortune. This naturally gave rise in the evening to questions and remarks concerning the manufacture of a substance which has brought such immense wealth into circulation; and Mrs. Acton gave her children the following short account of it.

"Cotton is produced in America, the Indies, and other warm climates, and grows in pods on a bush

a few feet high. The carding and spinning of it was formerly a very tedious process, but the ingenious mechanism you saw this morning has brought the article into such universal consumption, that several hundred thousand persons are now employed in preparing it; and when manufactured, it has become one of the staple commodities of the kingdom.

“The ancients used to mix cotton with the fibrous part of a peculiar stone called asbestos, which has the property of resisting fire; and thus made a sort of cloth to wrap round the dead bodies of eminent persons, in order to preserve their ashes from being lost in the funeral pile.”

While remaining at Matlock, Mr. Acton did not fail to drive his family over to Hardwicke Hall, a seat of the Duke of Devonshire, which retains both the architecture and furniture in fashion two centuries ago; and from thence, leaving the imposing ruins of Bolsover Castle on the right, he took them to the town of Chesterfield, where, from a singularity in the construction, the spire of the church (much to William's astonishment) always seemed to be leaning towards him whichever side he looked at it.

In returning next morning, the party visited Chatsworth; a very noble mansion of modern construction, which possesses an extensive park and some fine waterworks in the gardens. But both

Julia and William were infinitely more gratified by another excursion over dreary hills abounding in lead mines, to the romantic scenes of Dove-dale; where wood, rock, and water, combine to form a picture which none can visit without admiration.

After a stay of some days at Matlock, our tourists followed the road which winds up the lovely valley of the Derwent, and got out of the carriage near Bakewell, to look at Haddon Hall; which is supposed to be in its interior the most perfect specimen now remaining of the style of building in Queen Elizabeth's time. The small and numerous apartments, narrow windows, concealed passages, and stone flooring, gave the Actons a very unfavourable idea of the domestic comfort of our ancestors; and made them easily credit the statement of this old edifice being the scene of that celebrated romance, "The Mysteries of Udolpho."

On entering BUXTON, Julia expressed great surprise at such an elegant pile of building as the Crescent having been erected in so dreary a waste; but on seeing the number of individuals who had come to try the efficacy of its warm springs in removing rheumatic and scrofulous complaints, she no longer wondered that a town should be raised in a desert. In the evening, the conversation turned upon the virtues of chalybeate waters in general, when Mr. Acton enumerated those most celebrated in England and the continent of Europe; and an

the request of his family, gave the following account of the hot springs in Iceland.

“ They are among the most remarkable natural phenomena ever discovered ; and situated at no great distance from the volcanic mountain of Hecla, which throws forth its flames amidst eternal ice and snow. Forty or fifty columns of water of different dimensions (but one of them not less than nineteen feet in diameter) are thrown up into the air with astonishing force, sometimes reaching the height of ninety feet ; and the heat of them is so intense, that they will completely boil a piece of meat in two or three minutes. Some are seen bursting forth from apertures in the earth ; others are projected from the bosom of a lake ; and all travellers agree, that it is one of the most extraordinary sights they ever witnessed. I have however heard, that about sixty yards from the shore of the little island of Ischia, near Naples, there is a boiling spring which bubbles up to the surface of the sea, and communicates its heat to the salt water around ; which is I think, almost as great a curiosity as the above.”

Buxton has nothing to interest any person but an invalid ; and William gladly rose at an early hour to quit it, as his father had determined to visit the caves about Castleton on their way to Sheffield.

After passing over six miles of very dreary country, Mr. Acton pointed out a small pool by the side of the road, which is called the Ebbing and

Flowing Well ; where the motion of the water is extremely irregular, rising and falling more or less frequently, according to the wetness of the season. He remarked, that it was by no means so certain in its effects as one near the town of Settle, in Yorkshire ; where the water would rise and fall five or six inches every eight minutes, and was more particularly curious in a fine dry summer.

At the extremity of a precipitous pass between lofty rocks called the Windgates, the party explored Speedwell Mine ; where passing 750 yards along a subterraneous canal, they found a vast rent in the mountain, formed by a cascade which tumbled down the abyss with tremendous noise.

They next turned their attention to the immense cavern under the lime rock on which stands the remains of Peverel's Castle. It is called the Devil's Hole ; and when lighted up, is from its vast dimensions well worth inspecting, though destitute of petrifications.

At the smoky dirty town of SHEFFIELD, the young Actons had an opportunity of viewing the manufacture of knives and cutlery in the highest perfection ; and then passing through the towns of Barnesley and Wakefield, and a rich tract of country embellished by the parks of Wentworth House and other seats, they entered LEEDS.

This they found to be a large and flourishing town, containing upwards of 70,000 inhabitants ;

but very disagreeable to travellers, from the dense volumes of smoke and soot. As it is the centre of the clothing district, they visited the two large quadrangular buildings called the **White and Mixed Cloth Halls**; where they saw assembled a greta number of the manufacturers from the surrounding villages, with the pieces ready finished and fit for sale; and could not avoid remarking them to be a most emaciated race of people; arising probably from intemperance, and their constant confinement to hot rooms.

When conversing on what they had that day seen, Mrs. Acton informed her children, that the woollen manufacture was first introduced into England from Louvain in Flanders, in the year 1420.

About four miles to the west of Leeds, Julia and William were delighted with the beautiful monastic remains of **KIRKSTALL ABBEY**; which was founded in 1152, the latter end of the reign of Stephen; and is a mixture of the Saxon and early Gothic architecture. Many parts of the ruins, particularly the western entrance, are covered with ivy in the most picturesque manner; and though they are now in any thing but a secluded situation, must formerly have occupied one of the most delightful sites in Britain, when the undulating hills which bound the valley of the Aire were covered with timber.

Mr. Acton next day drove his family through the

park to the noble mansion of Lord Harewood; thence to the rural church of that village, which is embosomed in trees, overgrown with luxuriant ivy, and contains a monument to the memory of the intrepid Chief Justice Gascoigne, who, in the fourteenth century, committed Prince Henry to prison for striking him.

On resuming their journey, the massive square tower of Harewood Castle, built soon after the Conquest, and now in ruins, formed a fine object amidst the various beauties of Wharfedale; and a few miles further, the party alighted from the carriage to view the pleasure grounds at Plumpton Park, which are laid out with great taste.

Mr. and Mrs. Acton determined to make HARROWGATE their head-quarters for a week or ten days, and explore the fine country in its vicinity at their leisure; but as their children and themselves were in perfect health, not one would drink of the sulphur spring a second time, both the taste and smell being offensive beyond description.

One of their earliest excursions was to Knaresborough, which stands on a hill half encompassed by the romantic little river Nid; and the ruins of its old castle, so vigorously defended during the civil war by the partisans of Charles, excited the attention of the young tourists. Julia was however infinitely more pleased with the famous Dropping Well, shaded by the rich foliage of the banks of

the river ; where two or three hundred little streams keep oozing through an enormous projecting fragment of a rock, and petrify every thing exposed to their influence. Wigs, birds, boughs, and many other objects, were shown in a petrified state ; and a few of the smaller articles being purchased to add to Julia's collection of curiosities at Woodlands, they continued their route towards York.

On passing over Marston Moor, Mr. Acton related to his son the particulars of that decisive action, which cost Charles his crown and life ; and was lost through the fiery courage of Prince Rupert, who forgot the duty of a general in the ardour of pursuing those he had defeated.

From the celebrity of the city of YORK in English history, William approached it with a feeling of respect ; which was soon dissipated however by the dilapidated state of its walls, gates, and other remains of antiquity, added to the narrow, ill-built streets.

The interior of the Minster, with its long vista of lofty arches, its superb painted windows, choir, and elegant stone screen, was pronounced by the whole party to be magnificent. Nor were they much less pleased with the Gothic carvings in the chapter-house, and the drinking horn of Ulphus the Saxon ; but Julia expressed great disappointment at finding the exterior of so splendid a building completely choked up with paltry houses. William got per-

mission to explore the ruinous keep of the old castle, close to which are the gaols and sessions-house ; and before quitting the town, they walked to look at the picturesque remains of St. Mary's Abbey, which stand on a small elevation above the river Ouse.

Mr. Acton chose a fine sunshiny morning for his drive to that beautiful part of Wharfedale, where the ruins of Bolton Priory add such an interest to the charming scenery around, as to make it one of the most admired spots in the kingdom.

Having left the carriage at the excellent inn, they rambled up a valley, where wood, rock, and water are most harmoniously mingled. Sometimes the river glided silently among the pastures ; at others foamed against the bases of dark mountains which towered above the foliage ; but when they entered the ravine of the "Strid," and saw the castellated mansion, Barden Tower, raising its grey turrets above the woods, Julia's enthusiasm at the prospect caused her to repeat the following beautiful lines from Mason :—

" Happy art thou, if thou canst call thine own  
Such scenes as these ; where Nature and where Time  
Have work'd congenial ; where a scatter'd host  
Of antique oaks darken thy sidelong hills ;  
While, rustling through their branches, rifted cliffs  
Dax their white heads, and glitter through the gloom.  
More happy still, if one superior rock  
Bear on its brow the shiver'd fragment huge

K

Of some old Norman fortress ; happier far,  
Ah then most happy, if thy vale below  
Wash, with the crystal coolness of its rills,  
Some mouldering abbey's ivy-vested wall."

The following day being rather cloudy, William and his father enjoyed very capital sport, fly fishing ; as the trout were numerous and rose freely to the bait, though so late in the season. Julia, in the mean time, was equally gratified in sketching some of the most picturesque views of the old priory and its vicinity ; so that all were sorry at returning to Harrowgate, and shortly after quitted it to continue their tour.

At Ripley they were much pleased with the antique looking mansion of Sir W. Ingleby, said to be in the same style as one erected there in the reign of Philip and Mary ; and then following a circuitous but agreeable road through the valley of the Nid, and passing the night at the village of Paitley Bridge, Mr. Acton conducted his family to those great natural curiosities called Brimham Crags.

They here found on the summit of a ridge of sandstone hills, vast masses of detached rock covering nearly thirty acres of land, broken and perforated by the winds and rain in a most unusual manner. Many of them, though enormous in size, rested on so small an apex, that William found no difficulty in pushing them backwards and forwards with his

hand. On getting into the carriage again, the conversation turned on Stonehenge, the Logan Rock in Cornwall, and the other Druidical monuments now existing; but they were all much more inclined to attribute what they had just seen to the effects of time and weather, than to the efforts of superstition.

A drive of a few miles brought the party to Studley Park and Fountains Abbey; which is deservedly considered one of the most splendid monastic ruins in this island. A narrow woody dell, which Julia's taste declared to be a little too much trimmed by gardeners, introduced the Actons to this proud building of the Romish faith. They found it situated on a small level lawn, in perfect seclusion; and erected in a style of Gothic architecture which does credit to the reign of Henry the First.

At the ancient borough of RYON, our tourists viewed the venerable collegiate church; and an artificial conical hill about sixty feet high, which Mr. Acton said he believed to be one of those places called "*Laws*," by the early Britons, where they used to assemble for the administration of justice and other national affairs.

The precipitous banks at Hackfall, and the extensive prospects over the rich vale of Mowbray, the pleasure-grounds and fine groves of Swinton Park, were all admired in their turn, and Julia

again had employment for her pencil among the picturesque ruins of Jervois Abbey.

Further up the valley of the Ure, frowned the massive towers of Middleham Castle, which, though dismantled, seemed to bid defiance to time itself. Passing this fortress, the Actons entered the far-famed WENSLEY DALE, where the extensive park of Bolton Hall, and highly diversified scenes of cultivation, are bounded by bleak mountains of very considerable height.

The peculiar and interesting falls called Aysgarth Force, where the Ure rushes over repeated ledges of rock; and the desolate remains of Bolton Castle, in which Mary Queen of Scots was for a short time confined, made the upper portion of this valley extremely pleasing to our travellers, and they turned back with regret.

The town of RICHMOND, rising like an amphitheatre above the river Swale, and the ruins of its stately castle, founded by the nephew of the Conqueror on the summit of a precipice 250 feet high, justly excited the admiration of Julia and her brother. In the evening they walked about three miles down the vale, to look at the small ivy-covered remains of Eastby Abbey; and were charmed with the beauty of the country, though William would not allow that it equalled in luxuriance and rural scenery the prospects from Richmond Hill on the Thames.



On pursuing their route, Mrs. Acton pointed out some few remains of a castle; and it was agreed to remain a day or two at one of the excellent inns of GRETA BRIDGE, in order fully to explore the cliffs and dells so elegantly described in Sir Walter Scott's poem of Rokeby.

The young Actons were indefatigable in their rambles to Mortham Tower, and the deep shady ravine of the Greta; the marble rocks which enclose the river Tees, the ruins of Egglestone Abbey, Thorsgill Dell, and Wycliffe Hall; but they were obliged to solicit their father to drive them to the grand feudal castle of Raby, the extensive ruins of Barnard's Castle, the lofty Fall of the Tees, and the beauties of Deepdale, as those places were too distant for a walk.

When the party quitted Teesdale, a most dreary country appeared in front; one wide sweep of elevated fells or marshy moors, with the strong Norman castle, and wretched little town of Bowes, at the very verge of cultivation. Mrs. Acton asked her daughter if she remembered the affecting ballad of Edwin and Emma, assuring her that this miserable place was the real scene of their hapless loves.

Not far beyond Bowes, they got out of the carriage to see an arch formed by the river Greta, whose waters have forced a passage through the lime rock; and from one of the highest points on

the cheerless waste of Stainmore, called "Kere Cross," the Actons surveyed the vales of Yorkshire, with the same delight as it is said James the First did when he arrived there from Scotland.

The plains of Westmoreland, very thinly adorned in this part with trees, and the bare and tottering walls of Brough Castle, were not very pleasing objects to our tourists; but the flat table-like summit of Cross Fell, rising 2900 feet above the level country, could not fail of attracting their attention. Mr. Acton mentioned the singular circumstance of there being a spring of excellent water on the very top, although no higher ground was within thirty miles of it; and further stated, that the Roman road called the Maiden Way, ran across the whole ridge of the mountain.

The groves about Appleby Castle were doubly grateful after the open country they had recently passed through; and the luxuriant environs of Penrith, with the mountains of Cumberland in the background, quite charmed Julia.

During their stay at the thriving town just named, the Actons walked to the hill of the Beacon, which commands a view of the whole vicinity; then to the ruined castles of the town and of Brougham; to the noble residence of Lord Lonsdale, and the romantic glens of the impetuous river Lowther. They also examined the various ancient embankments thrown up near Eamont

Bridge, particularly the Druidical monument called Maybrough, and the circular plot of ground so smoothly levelled, and named Arthur's Table. The last induced William to beg his father would give them an account of the famous Round Table, so celebrated in romance; and his request was thus complied with:—

“ Prince Arthur was made king of the Britons not many years after the landing and settlement of the Saxons in this island; and by his bravery recovered the greater part of England from those freebooters. In this he was greatly assisted by many valiant knights, to reward whom, without showing a preference which might create jealousy, he instituted in the year 516 the order of the Round Table for twenty-four members, from the nature of which there could be no precedence in rank or seats.”

The first lake visited by the happy family of tourists (who had provided themselves with Otley's map of the district) was Haweswater, which, though unfrequented, is really a very interesting scene. Julia was delighted with the rural seclusion of the spot, and the woody sides of the towering mountains which enclose it; and having taken the sketch of a cascade and old mill, they drove back to Penrith, highly gratified with the day's amusement.

The following morning they passed along the

luxuriant vale of the Eamont, where Mr. Acton pointed out to the notice of his children several farm-houses with massive square towers attached to them. "Nothing," said he, "will more forcibly impress on your minds the insecurity of the borders before the Union of England and Scotland, than observing that each house had a strong place of retreat adjoining it.

From the site of a Roman fort, placed on the top of a conical hill near Pooley Bridge, the Actons had their first view of ULLSWATER. Admiration at a scene which so far surpassed their utmost expectations, kept them silent for some minutes.

"Can any prospect be more exquisitely lovely than this?" exclaimed Julia. "Observe the expanse of water sweeping along the base of yon gigantic precipice; the verdant margin of the lake dotted with cottages; the mixture of rich foliage, bare rocks, and gentlemen's seats: do they not form a landscape which even a poet's imagination could not exceed?"

"Softly, my dear girl," replied her mother, "or you will exhaust all your expressions of praise here, though your father assures us that new and equal beauties will meet the eye at every turn of the road."

Mr. Acton had not deceived them; the next great reach of the lake was even more sublimely romantic than the first. Bold masses of almost

vertical rock rose at once from the water on one hand; while Lyulph's Tower reared its turrets amid the aged trees of Gowbarrow Park on the other. The gratification of the whole party was extreme; their attention was kept constantly on the stretch by the variety and interest of the views; and after driving slowly along the banks for about six miles, a second great bend of the lake displayed the finest portion of Ullswater. The towering crags of Place Fell hung in gloomy wildness over the rippling water, and the dark cliffs of Helvellyn appeared far above the woods, and fragments, and deep ravines which adorn its base.

They stayed three days at the comfortable little inn of Patterdale, and the pencil was not neglected. A boat conveyed them to many parts of the lake, which commanded views they could not otherwise have enjoyed; and gave them the best opportunity of listening to the echoes for which Ullswater is noted.

One morning William and his father ascended Helvellyn, a fine mountain 3070 feet high; and on another occasion they landed with the ladies near Lyulph's Tower, in order to look at the waterfall called Airey Force. In the various rambles they took, Julia was much pleased with the bare and twisted roots, and pendant trees so common in a mountainous district; where the torrents rush down with an impetuosity that carries away all the soil,

and leaves the timber vegetating on rock. This gave rise to a conversation concerning the species of trees generally found in Alpine regions, in the course of which Mrs. Acton mentioned a singular property of the birch; that if tapped, it would produce in twelve or fourteen days as much juice as would outweigh the whole plant, body and roots.

On quitting Patterdale, the travellers pursued an excellent road, through a valley which abounds in sylvan charms; often stopping to gaze back on the landscape they had left, or at the summits of the lofty hills seen above some scudding cloud. On Broaderwater, and its wood of waving birch trees, they could look with pleasure, notwithstanding its comparative inferiority; and ascending to the pass of Kirkstone, afterwards continued their route through the little town of Ambleside to Low Wood, which had been fixed on as a central position to make excursions from.

The situation of this excellent inn is most agreeable, being within a few yards of the shore of Windermere; and the young Actons took advantage of this the morning after their arrival, by rising early and wandering along the lake, admiring the magnificent prospects bounded by Langdale Pikes, and the fine semicircular sweep of mountain called Fairfield.

The cascade behind Ambleside, named Stock Gill Force, where a torrent has worn its way

through a deep narrow dell, darkened by thick foliage, Julia thought she could never be tired of gazing at, and of sketching; indeed, it is perhaps one of the most romantically picturesque spots in the kingdom.

On a rocky promontory which rises from the northern extremity of Windermere, Mr. Acton pointed out the remains of a Roman station, equally well chosen for strength and the beauty of its environs: "Their views of the lake and mountains from this rampart on a summer's day," continued he, "must, I think, have reminded them of some scenes in the north of Italy; and have recalled to the minds of the soldiers the memory of their far-distant homes."

The lovely valleys of great and little Langdale were visited in the carriage, the roads being good; but in order to see the various beauties of Windermere to the greatest advantage, Mrs. Acton recommended a cold dinner being put on board a boat, and their giving up a whole day to the pleasures of a water excursion. The views they enjoyed from the bosom of this magnificent lake delighted them exceedingly. The deep bays and rocky promontories, the mixture of cultivation and precipice, and the numerous islands near the pretty village of Bowness, prevented any thing like uniformity in the scene.

They sailed close to the sycamore and cherry

trees which shade the elegant inn called the Ferry House, and some miles below it; after which they returned to Curwen's Island, landed, and spread their collation under some large forest trees, with all the eagerness of gaiety and a good appetite. The sail back to Low Wood in the evening, they thought even more interesting than all they had experienced; for the prospects being reversed, the loftiest peaks of the Cumberland range appeared directly in front.

The carriage being ordered next morning, Mr. Acton drove his family to the Lake of Coniston, which he told them was remarkable for possessing the scarce fish called char. It is a beautiful sheet of water at the foot of several bold masses of rock, where the scenery is characterised by deep seclusion and solemn grandeur.

William scaled the summit of Old Man Mountain, while Julia took drawings of the vicinity of Waterhead Inn, at which they had secured beds for the night; and the next day, after rowing about the lake for a few hours, the party returned to Low Wood.

A few more rambles and drives around Ambleside, and the Actons left its vicinity with regret, taking the road to Keswick

At Rydal Hall the carriage was stopped, and our tourists walked through the extensive pleasure-grounds of that ancient residence, to look at two

small waterfalls; which, though very pretty, they all agreed to be far inferior to Stock Gill Force.

Passing Rydalwater, the soft pastoral beauties of Grasmere Lake burst at once on their view, which they allowed were truly worthy of the poet's praise: and a mile or two beyond, Mr. Acton showed his children Dunmail Raise, a heap of stones placed to the memory of a king of Cumberland, who was slain there in the year 945 by Edmund the Saxon.

This anecdote caused William to ask his father, "whether there was not, somewhere in this part of England, a Roman entrenchment or wall, which had served as a boundary against the Caledonians?" "It is farther north," replied Mr. Acton; "extending from below Carlisle, quite across the island, to Newcastle-on-Tyne; and there are the remnants of another in Scotland, erected by the same warlike people, between the Friths of Clyde and Forth. But after all," continued he, "what are either of these works, when compared to the great Chinese Wall in Tartary; for that is said to extend 1500 miles, across deep valleys and lofty mountains?"

The carriage now descended to the valley of Leatheswater; where the Raven and Castle Craggs, backed by the grand southern precipices of Saddleback, rivetted the attention of the travellers, until shortly before entering the town of Keswick, when a magnificent view of Derwentwater made them forget every other.

One of the most gratifying circumstances in a tour of the English lakes, is the great variety they present. Each has a character of its own ; and the visitor is not fatigued with a monotonous routine. The Actons most fully appreciated this advantage ; and the Lake of Keswick seemed to them to possess beauties they had not hitherto seen or admired.

The wild romantic valley of Watendlath, the thundering cataract of Lowdore, the picturesque group of crags which inclose the celebrated pass of Borrowdale, were all objects of the greatest interest ; and explored over and over again : William even persuaded his mother and sister to ride on ponies to the summit of Skiddaw, which they effected without either so much trouble or fatigue as they had anticipated ; and were rewarded by almost boundless views of the level country to the north, and of a broken Alpine tract to the southward.

The Lake of Bassenthwaite is a noble sheet of water, and its margin affords some pleasing drives which our tourists did not fail to avail themselves of ; nor did they forget to visit the neighbouring druidical circle of stones, previous to their departure for the black-lead mines.

The road to the latter conducted them through all the windings of romantic Borrowdale, to a small village situated amid impending cliffs and hanging woods ; near which Mr. Acton deviated a little to the left, to show his family Eagles' Crag, and its

accompaniments: then returning to his path, they wound up the valley of Seathwaite, to the spot where that uncommon mineral called **PLUMBAGO** is found.

They were informed by the miners, that lumps of it are dug out of cavities in the mountain perfectly pure; which undergo no process whatever previous to being cut into thin slips for pencils. The mine was discovered about 400 years ago, by a piece of the plumbago sticking to the roots of a tree which had been blown down by the wind.

Mr. Acton sent back his carriage from hence to Keswick, desiring the servant to meet them with it next day, at the inn near Crummockwater; while he and his family proceeded on hired horses (which had been waiting for them from an early hour) to Wastwater.

The zigzag path of loose stones which conducted them to the rugged scenes of Wast-Dale, made Mrs. Acton and her daughter not a little fearful of the descent; but when once they had arrived there in safety, the height of the bleak mountains which encompass the lake, and the extreme desolation yet grandeur of the prospect, filled them with admiration.

The long streams of shingle which poured down the sides of the Screes, glistening in the rays of an evening sun, was a sight both novel and imposing: and now and then a sheep seen on the projecting

crag of a tremendous precipice, or a small torrent whitening with its foam the dark rocks over which it fell, excited sensations in the minds of the party never to be forgotten.

After a long and fatiguing ride, the Actons reached the inn at Calder Bridge, where they passed the night; and before breakfast next morning, walked to the lofty and elegant Gothic arches of the ruined abbey; with which Julia was so much pleased, that she begged her parents to remain long enough for her to take a sketch of so lovely a spot.

Their ride to the large melancholy looking sheet of water in Ennerdale, was tedious and uninteresting enough; nor did it much improve till they caught glimpses of the rural landscapes which bound the little basin of Loweswater; along the margin of which a good road conducted them to Scale Hill Inn, where they found their servant and carriage waiting.

Part of the next day William and Julia amused themselves in exploring the rich vale of Lorton, and the shores of Crummockwater; after which the whole party got into the carriage, and proceeded along the base of immense ledges of rock to the upper end of that lake, near which the comfortable little inn of Buttermere is situated.

After dining, Mr. Acton hired a boat on Crummockwater, to try the effect of a bugle-horn on

some fine echoes; and then landed near a tremendous rent in the side of a mountain, down which they saw tumbling the cataract of Scale Force.

The high and craggy precipices which rise in strange confusion around the small Lake of Buttermere, in some places projecting beyond their bases, in others forming deep recesses, strongly excited the fancy of the young travellers; but when their father led them up a long narrow pass, between cliffs which seemed to have been rent asunder into a gradual sweep by some convulsion of nature, they were filled with astonishment.

"Surely," said Julia, "no solitude can be more melancholy grand than this of Gatesgarth. Not a tuft of herbage or heath is to be seen; no tree, or even shrub, but that aged yew; and not a single sheep appears to break in upon the perfect loneliness."

"Is it not strange," remarked William, "that so many yew trees should be allowed to grow in this district, the leaves being a rank poison?" "It is a singular property of the plant," replied Mr. Acton, "that while a very small quantity of its leaves and twigs will kill horses and cows, sheep and deer sometimes feed on them with impunity."

The drive from Buttermere, down the vale of Newlands to Keswick, afforded the Actons new

and charming prospects of Derwentwater; and in retracing their route from thence to Ambleside and Low Wood, some point of view which had previously escaped their notice was continually discovered, so that nothing like sameness occurred on the journey.

The morning they left Low Wood, and bid adieu to the district of the Lakes, was a sorrowful one to the whole party. The country they had lately explored, had been such a continued scene of romantic and pastoral beauty, had so far surpassed their most vivid fancies, that the crowded streets and bustle of the town of Kendal was quite irksome.

They were however pleased with their walk to the isolated hill on which stand the ruins of an ancient castle, though afterwards wearied with the dreary road to Kirkby Lonsdale; and experienced several hours' gratification in rambling about the luxuriant valley of the Loyne, before they started for a tract of limestone country, the features of which were entirely different from any they had before seen.

At the comfortable little inn of Ingleton, Mr. Acton determined to remain two or three days, in order to show his wife and children the curious natural excavations in its vicinity. He accordingly sent forward people with a sufficiency of lights to illuminate every part of the cave, and then drove

his family to that called Yordas. On entering, they were almost inclined to believe what they saw the effect of enchantment. They stood in a cavern of vast dimensions, whose sides and roof were studded with the most beautiful petrifications, hanging in a variety of fantastic and pleasing shapes, and reflecting the light of the candles most brilliantly. At the farther end, a cascade of great height was falling with terrific violence, and had covered the nearest points of rock with incrustations from its spray.

On again getting into the carriage, the wonderful sight they had just witnessed excited so much admiration, that Mr. Acton was induced the same evening, to give them the following short description of the famous GROTTA OF ANTIPAROS, an island in the Archipelago :

“ It is situated between 900 and 1000 feet below the surface of the ground ; and can only be reached by descending such a succession of steep and dangerous precipices, that few travellers have had resolution to explore it. The grotto is about 300 feet in length, nearly the same wide, and 80 feet high ; covered with the brightest crystals, which reflect the lights in all the colours of the rainbow. When the eye has become sufficiently accustomed to such a blaze of splendour, to be able to discern particular objects, the roof appears hung with

pendant gems ; the droppings from which have formed on the floor a grove of crystal trees and shrubs, some of them eight or ten feet high, but the generality only three or four. All these are covered with little shining points, whose angles refract the rays of the flambeaux in a most splendid manner. The sides of this wonderful cavern are in some parts covered with smooth sheets of crystal ; in others, with irregular figures or spreading shrubs of the same beautiful substance ; and in many places the crystal stands out at a distance from the rock, forming a kind of curtain of pure pellucid matter. Stars, festoons resembling fruits, foliage, and flowers, stalactites or stony icicles twenty or thirty feet long, and a number of other objects that I cannot do justice to in the description, are attached to the roof in every direction ; so that it is impossible to conceive any thing in the world to be more amazingly magnificent than this grotto, concealed under the rocks of a small island."

Julia and her brother thanked their father for this interesting account ; and the next morning the latter climbed to the crested summit of Ingleborough ; which, though not the highest, is certainly one of the finest mountains in Great Britain, and crowned with a very ancient entrenchment.

To the extreme surprise of our young tourists, the whole country near Ingleton seemed to be filled

with subterranean hollows ; for not only did they meet with numerous yawning abysses down which tumbled rivulets, but wherever they put their ear to the ground, the roar of falling water was distinctly heard below the surface.

Several letters having been delivered to Mr. Acton and his family, by the regular post, William expatiated with great energy on the rapidity with which the present excellent system of mails conveyed communication from one part of the kingdom to another. " Here we are," continued he, " at a small inn of one of the most out of the way places in England ; and yet we correspond with our friends and receive their answers, with as much facility and safety as if only a few miles from London. Can you tell me, dear father, how long this plan has been followed ?"

" The improvement you so justly admire," replied Mr. Acton, " has only been adopted a few years ; but a post-office was first established by act of parliament, in the 12th year of the reign of Charles the Second. As far back however as the time of Richard the Third, men were stationed at the distance of every twenty miles for the conveyance of expresses and letters. You may easily imagine how insecure such a mode must have been ; and as it was only carried into effect from the capital and a few of the chief towns to the place where the king

and court happened to be residing, the intelligence of passing events travelled very slowly into the distant and secluded portions of the kingdom. The Romans kept up a regular communication between their provinces and the seat of their empire ; and I have read in some author or other, I forget which, that the time taken up in conveying intelligence to Rome from their armies in Britain, was not much more than what is required now. Many inventions have been practised at different times, and among various nations, to prevent written communications from being understood by any other persons than those to whom they were addressed ; but I think one of the most ingenious, was wrapping the letter round a stick in so peculiar a manner that when unfolded, no individual could make sense of the writing unless possessed of a stick exactly similar to the first."

The Actons did not quit Ingleton without paying a visit to Weathercote Cove ; where, standing under a rude arch of rock, they enjoyed the view of a fine cascade rushing over a cliff, and disappearing amidst the rubbish at the bottom as if by enchantment.

Lancaster they found to be like other very old towns, ill built, with narrow streets ; but the square keep and several smaller towers of its famous castle, as well as the gateway erected by John of Gaunt, made an imposing appearance.

Proceeding southwards, they passed the ruins of Garstang Castle, and through the large manufacturing town of Preston to the rich vale of the Ribble. The eastern part of Lancashire is flat, and not particularly interesting to travellers; so that the Actons were not sorry to enter the important town of LIVERPOOL, and inspect its noble docks, its exchange, hall, markets, and botanical gardens.

At this great commercial port, where the enterprising spirit of the merchants has carried trade to its utmost limits, William had an opportunity of seeing an amazing variety of goods, and of inquiring into the uses of many articles he had not been previously acquainted with. He knew that the immense quantity of tobacco landed was to be consumed in snuff and smoking; but he was obliged to apply to his father for an account of the plant which produced it.

"TOBACCO," answered Mr. Acton, "was discovered by the Spaniards in 1520, near a town of the same name on the Gulf of Mexico, and was brought by them to Europe forty years after. Sir Walter Raleigh first introduced it into England in 1585; and there is a laughable story about his servant being alarmed at finding him smoking, and throwing some wine in his face to quench the fire."

"Here, William," continued the fond father,

"is another object worthy of attention ; a small insect found on a shrub in Mexico, and no where else. It is called the cochineal, and gives a most beautiful scarlet and purple dye."

Mr. Acton then pointed to several other things, making remarks on them to his son as they continued their walk. "That is camphor, a kind of gum proceeding from a tree found in the islands of Borneo and Ceylon. Observe this large piece of timber ; it is mahogany, brought from Jamaica, and grows frequently to the height of 100 feet. The peculiar beauty of its valuable wood, with the fine polish it is capable of taking, was accidentally discovered scarcely one hundred years ago ; and yet it has now completely superseded the use of the walnut tree in cabinet work. That which lies near it is ebony, a scarce and expensive wood, the best sort of which is brought from the islands of Madagascar and Mauritius. Look at that substance ; it is called indigo, and is used in dying blue colours, being prepared from the leaves of a plant about two feet high, found in Hindostan."

Liverpool is particularly well supplied from America and the West Indies with excellent fruit ; and several sorts, not commonly seen in the shops of our country towns, attracted the attention of Julia. In answer to her inquiries, Mrs. Acton mentioned that—"pine-apples grow wild in many of

the warm climates, but are no where better than when raised in English hothouses; an experiment first tried in 1690 by the Earl of Portland. That large fruit, bigger than a cocoa-nut, is called the bread fruit, and grows on a tree something like the apple. The inside of its tough rind, when baked, resembles soft new bread, and is extremely nourishing; so much so, that it is eaten eight months in the year in the island of Otaheite, as a substitute for that necessary of life. The tree on which the plaintain or bread-fruit grows, is a native of some of the South Sea islands, and has been introduced into the West Indies."

A boat conveyed Mr. Acton and his family across the Mersey; which in this part is two miles broad, and very dangerous in stormy weather. On landing, Julia had the pleasure of sketching the ruins of Birkenhead Abbey; and they passed through an agreeable country to CHESTER, which is said to have been a place of importance even before the time of the Romans; and certainly became one of the greatest military stations of that celebrated people. The Actons were surprised at the singular appearance of the four principal streets, in which the first floors of all the houses being open to the front, form galleries for the passengers to walk in; and they felt also considerable interest in viewing the Roman bath, or sudatorium, it being a memento

of ages so long passed away. The narrow walls which still surround the town, afforded them a prospect of the distant outline of Welsh mountains; and they afterwards visited the cathedral, which has nothing to boast of either in architecture or decoration.

In compliance with the promise he had made his children at Droitwich, Mr. Acton now took them about sixteen miles to inspect the ROCK SALT MINES; and on their road pointed out the ruins of Beeston Castle, which stand on the brow of an isolated precipice rising 250 feet above the rich plains of Cheshire.

Having made arrangements for the illumination of one of the largest chambers excavated, and covering the bucket with some pieces of old carpet to prevent the ladies' dresses from being dirtied, they descended the shaft two at a time with a miner. At the depth of eighty yards they were kept suspended a minute or two, in order to see an immense cavern formed in the first, or coarser strata of salt; the roof of which was fifty-five feet high, and supported by thirty-six massive columns purposely left standing. A few hundred small bits of candle stuck against the sides and pillars, had a very fine effect; but the idea of trusting merely to a rope for preservation, made Mrs. Acton and her daughter eager to get to the bottom of the pit, which was about thirty yards

more. On stepping from the bucket, they were all truly astonished at the sight they witnessed. They stood in an apartment 140 yards long by 115 wide, hollowed out of salt. The roof was eighteen feet from the floor, flat, and supported by nine large square pillars; the air perfectly pure and dry; and the whole most brilliantly lighted by many hundreds of pieces of candle. William and Julia expressed surprise at finding the general appearance of the sides and roof like that of brown sugar-candy; although it was true, that narrow veins of a perfectly white, and sometimes of a deep red colour, could be traced in various directions. The rock did not reflect the lights, but being composed of minute crystals, sparkled beautifully; and the effect of blasting masses of it with gunpowder, was like the reverberations of thunder, ascending the shaft to the upper mine, and rolling over their heads in repeated echoes.

The young people returned to Chester, delighted with their excursion to so great a natural curiosity; and the next morning started for Eaton Hall, the superb residence of Lord Grosvenor, lately rebuilt in a Gothic style of architecture. From thence the party proceeded through a pleasing country to Gresford, and the thriving town of Wrexham; enjoying distant views of the more mountainous parts of Wales, and of the ruins of Hope Castle.

The Actons found the church of the last named town to be a most elegant and ornamented pile, containing some well sculptured tombs; and continuing their route, they passed the extensive domains of Wynnstay and Chirk Castle; and went two or three miles beyond the turn of the road to Llangollen, to look at a very handsome stone aqueduct which crosses the picturesque glen of the Cyreiog.

It took our travellers a whole day, and part of a second, to view the beauties of the far-famed Vale of Llangollen. The cottage of the Recluses, the ruins of Dinas Bran Castle, and Vale Crucis Abbey, the singularly marked cliffs opposite the town, and the astonishing work which conveys a canal across the foaming waters of the Dee; had all their peculiar charms to urge the inquisitive researches of the visitors.

"I see, father," remarked William, "some use in this aqueduct, as it facilitates internal communication; but what could possibly have induced the ancients to build them merely to convey water, when pipes would have answered that purpose so much better?" "Your question, my boy, is a very sensible one," replied Mr. Acton, "but the truth seems to be, that however far advanced the Greeks and Romans might have been in the arts of civilized society, they were completely ignorant that liquids

would always flow to their own level. Therefore they judged it impossible to bring water across a valley by any other means than that of erecting a tunnel for it to run over."

The almost endless windings of the river, which seemed as if it was unwilling to quit the woods and rocks of so lovely a valley, afforded Julia numerous points of view for her drawing-book; and William observed, pointing to its shallow stream, that if the Saxon Edgar was ever rowed on the Dee by eight petty kings he had vanquished, it must have been in a deeper and less rapid part.

The next place our tourists came to, was the dirty little town of Corwen, near which is the site of Owen Glendyr's Castle, in a rich vale watered by the Dee; and five miles further, at Pont-y-Glyn, they got out of the carriage to look at a most romantic chasm overhung with oaks and other trees, down which rushes a small rivulet.

Ten miles across a high level tract of dreary country, brought them to the inn of Cynioge, where they slept; and the following morning pursued their journey along a road cut in the sides of lofty and rugged mountains, while at some distance below, the impetuous river Conway raged over the rocks which impeded its progress. This Alpine stream forms a succession of pleasing cascades, which are frequently discernible to the traveller through the

thick foliage that adorns them ; but Mr. Acton persuaded his wife and daughter to scramble down into the ravine, and see two falls of peculiar beauty under more favourable circumstances.

Near the iron bridge where the Holyhead road crosses the Conway, Julia took a sketch of two of the arches of Pont-y-Pair, which were most picturesquely shaded by ivy. And they then proceeded down the valley to Aberconway, passing the woods of Gwydir Castle, the small town of Llanrwst, a romantic little torrent near the village of Llanbedir, and the luxuriant environs of the Roman station *Caer-Hyn*.

The town of Conway had all the charms of novelty to recommend it. Being surrounded by walls and battlements, and towers, besides the magnificent and truly elegant ruins of its castle, which was founded by Edward the First, and commands a noble river that washes its base.

The Actons thought there was an air of grandeur and venerable antiquity about this town that they had never seen equalled ; and at every turn of the road when they quitted it, they endeavoured to catch one more view of its turrets. The pass of *Penmaen Mawr*, hewn out of a solid rock which rises 1500 feet perpendicular from the sea, filled the party with admiration ; and as it happened to be high tide, the prospects across the great Bay of

Beaumaris to the shores of Anglesea and its ruined castle, were inexpressibly fine

Beyond the pass at the village of Aber, they observed the mound on which once stood the castle of the great Llewellyn; and some miles further the groves around Penrhyn Castle, and the deep glen of the Ogwen, pleasingly occupied their attention till they entered BANGOR.

At this little city they met with most comfortable accommodation, and visited the neat church, which is dignified with the name of a cathedral. The next day Mr. Acton desired his servant to drive the carriage slowly to Capel Kerrig Inn, where he was to wait till the party arrived; and then having hired a boat, he gratified his family with a sail down the Menai.

The construction of the chain bridge, which was being actively carried on near the ferry, was an object of too stupendous a magnitude and interest to pass unnoticed; and after they had satisfied their curiosity, they floated down to Carnarvon, highly delighted with the beautiful scenes on each shore.

The castle of this well-built town has a fine effect. Its towers are octangular, which William thought gave a greater appearance of strength, though less elegant in their outline, than the round ones of Conway. He pictured to himself the state

of this majestic building when it presented to the Welsh a native prince but foreign sovereign ; and praised with great earnestness the bravery of a people who had so long resisted their more powerful neighbours.

Mr. Acton hired a guide, and two steady horses for the ladies, while himself and his son determined to walk and assist them ; and thus they started at a very early hour for the Pass of Llanberris. The peaks of Snowdon rising 3600 feet above their heads, and towering in hoary grandeur over numerous other lofty though less elevated moun ains, was a sight so truly sublime, that all their former Alpine prospects amid the hills of Cumberland, sank into insignificance. Soon after, the two lakes, and the old tower of Dolbaden, were displayed before them ; but they found both far too destitute of trees to be particularly interesting.

Whilst travelling through this retired valley, the Actons had an opportunity of witnessing a Welsh funeral procession, which in those unfrequented districts has a solemnity peculiarly awful, from the circumstance of all the neighbours assembling mourn the loss of one individual from their sma community. On observing a long line of persons winding down the side of a hill behind the coffin, Julia remarked how well black habiliments assimilated with the idea of grief, which no other colour

could do ; and was not a little surprised at hearing her mother assert that it was merely the force of custom, as on similar occasions the Chinese wore white, the Turks blue, the Egyptians yellow ; and the Ethiopians brown.

It would be impossible to describe the sensations of our tourists when traversing the Pass of Llanberis. A narrow cleft in the mountain several miles in length, whose sides rose perhaps 2000 feet perpendicularly, and whose bottom was so much covered with fragments as to render even the horse-path almost impracticable, excited thoughts of the utter helplessness of man, and the inferiority of his proudest works.

"Surely," cried William, "this is nature in ruins. Here Chaos seems to reign, and universal desolation attends his nod. Even the very streams which force their passage between the rocks, and are usually attended by some appearance of verdure, cannot here produce the slightest vegetation."

On being questioned concerning the wild goats formerly so numerous in Wales, the guide stated that they had been almost extirpated, on account of the damage they did to the young plantations, but a few were sometimes seen in the most inaccessible parts of Snowdon.

Quitting the pass, a dreary valley of five miles brought the party to the excellent inn of Capel

Kerrig, which is situated at the end of two large pools, and surrounded by the wildest ridges of crags and precipices. The conversation of the happy family circle here naturally turned on the various mineral and botanical productions of an Alpine region, and the effects produced by climate in different latitudes.

"The mountain we have this day seen," said Mrs. Acton, "is undoubtedly a very fine one; but it is only a miniature of those found on vast continents. The Alps, Teneriffe, and Etna, are three or four times as high as Snowdon; and yet what are they when compared with the Andes, or lofty summit of Thibet? one of which is said to rise 26,800 feet above the level of the sea. The line of perpetual snow between the tropics is 15,400 feet; and in this island it would be at the height of 5740 feet, but we possess no mountain approaching that point in elevation. In Switzerland, vegetation entirely ceases at an altitude of 9535 feet, and on the Andes, at 14,697."

William had solicited permission to ascend Snowdon during the night, in order to see the sun rise next morning from its top; but his father objected to the inconvenience and fatigue, and promised to accompany him in the evening if fine, to that lofty station. Accordingly, having amused themselves in the forenoon by scaling some of the smaller rocks,

and walking down the vale of the Lugwy to look at the picturesque falls of that stream, now in high beauty from the autumnal tints of the varied foliage which surrounded it, our travellers took an early dinner, and started in their carriage.

At the foot of the mountain, Mr. Acton and his son got out ; and accompanied by a guide they had engaged at the inn, began slowly to track a zigzag path up its precipitous eastern side, while the ladies proceeded to the inn at Beddkekert.

When William and his companions first reached the extreme summit, a thick mist enveloped them ; and they seemed to be standing on a point surrounded by immeasurable abysses, waiting only till that crumbled from under them to sink into a sea of clouds. Soon, however, the scene varied ; the mist passed off, the sun shone brightly, and an almost boundless landscape lay extended at their feet.

Wishing to descend to the southward, the guide led them along a very narrow ridge between two tremendous precipices ; and they there witnessed a sight as unusual as it was gratifying.

The sun was just sinking beneath the waves of the Irish Channel, when suddenly, Mr. Acton observed three figures to be reflected on a cloud, wafted towards the mountain by an easterly wind. As it approached, the shadows grew larger and larger, and at last too gigantic to be distinct. This phe-

nomenon was repeated on several clouds that succeeded each other, and William diverted himself by taking off his hat and bowing to the shadows, one of which of course imitated his motions. His account of the circumstance to his mother and sister, was extremely entertaining; and they scarcely knew what to believe till Mr. Acton reminded them of the story of the old man of the Harz mountains in Hanover, which no doubt had its origin in some similar optical effect.

A narrow pass between hills of very considerable height conducted the party to Pont-Aber-Glaslyn, where Mrs. Acton stopped the carriage for half an hour, to look at the astonishing leaps of the salmon, in their efforts to get beyond a barrier of rock which prevented their swimming up the river. And she again stopped it near a turnpike a mile or two further, where the whole range of Carnarvonshire mountains is seen at one view, and to the greatest advantage.

Mr. Acton ordered an early dinner at the inn of Tan-y-Bwlch, to give his family an opportunity of rambling about the luxuriant vale of Festiniog, where the romantic cascades of the Cynfail, and another beyond the groves of a Mr. Oakley's residence, gratified Julia's love of the picturesque exceedingly. Nor was she less pleased with the Rhaiadr Dhu, or black waterfall, in the grounds of

Mr. Maddocks, which they visited on their route to Dolgellge.

In this little town our tourists secured apartments for a few days, and hiring horses, rode to the top of Cader Idris ; to Nannau, the seat of the Vaughan family ; to the beautiful falls of the Mawddock and Cain, situated in one of the most secluded dells they had ever seen ; and lastly to Barmouth. There they got into a boat, and sailing up the river Mawddock at high water, enjoyed prospects which might almost vie with those around Ullswater.

On resuming his journey, Mr. Acton took a very agreeable route round the base of Cader Idris, and through a charmingly rural valley to Machynlleth, where he stopped an hour or two to refresh the horses, and then followed the course of the Rhydol to an excellent inn at the Devil's Bridge.

Early next morning, Julia and her brother were examining the picturesque dingle of the Mynach, which is close to the inn, and took some sketches of the deep chasm its waters have worn in the rock, over which is an ivy covered arch of great antiquity. Paths down the sides of the ravine, conducted them to a succession of very pleasing cascades ; and they returned to breakfast highly delighted and with a keen appetite.

On their road to Radnor, the party visited the elegant villa of Havod ; the grounds and peculiar

style of architecture of which they greatly admired. Yet they could not shake off a feeling of melancholy, at finding so lovely a domain separated by dreary moors from every social intercourse.

The Actons now approached Woodlands; and delighted as they were with all they had seen, they still rejoiced at the near prospect of home. So long an absence and continual exertion, had naturally fatigued their parents; and the young people sighed for their accustomed pursuits and domestic enjoyments.

The most essential object of Mr. Acton and his amiable wife was completely answered. They had gratified their children and improved their minds, by making them acquainted with a considerable portion of the most beautiful scenery in their native country; and yet they had the heartfelt satisfaction to hear them hail their return to the cottage and retirement with redoubled enthusiasm.

The arrival of this happy family was also a joyous event among their neighbours. All hastened to Woodlands to express their congratulations, and how much the loss of their society had been regretted. It was impossible not to feel pleased at returning among those who so warmly esteemed them; and the young Actons not only did feel so, but expressed it.

“ We have made a long excursion,” said they, “ and have visited a most romantic and lovely tract of country ; but we have met with no friends like those of our childhood, found no landscape so dear to our hearts as this around our home.”

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The writer having thus concluded a tale which has found him employment for many an evening which would otherwise have hung heavy on his hands, can only express a hope, that those who favour this little book with a perusal, will judge leniently of an author who has no other pretension, than the right to please himself, and the wish to amuse others.

















